360iResearch

Food Safety Testing Equipment Market

Global Forecast 2026-2032

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1. Preface

1.1. Objectives of the Study

- Which documented Food Safety Testing Equipment offerings serve the accepted equipment functions, testing objectives, and tested matrices, and how can their participation be distinguished from broader laboratory, industrial, or service portfolios?
- What purchasing, qualification, recognition, and acceptance conditions apply to the relevant end users, and which conditions must a supplier satisfy before an offering becomes a credible purchasing alternative?
- Which ownership, licensing, authorization, and territorial rights support an offering's commercial access, and what must be established before extending a conclusion from one jurisdiction to another?
- What commercial responsibilities are documented for Direct Sales, Distributor and Reseller Sales, and Agent- and Broker-Mediated Sales, including customer access, contracting, support, and continuity of supply?
- How do compatibility, integration, training, service coverage, and switching obligations affect buyer choices among Portable Equipment, Stationary Standalone Equipment, and Production-Line-Integrated Equipment?
- Which supplier capabilities and commercial relationships can be substantiated, and how do they change the set of credible competitors without treating a broad portfolio or technology label as proof of competitive advantage?
- How does the choice between internal equipment ownership and independent testing services affect buyer responsibilities and qualitative ownership economics while keeping laboratory-service activity outside the equipment boundary?
- Which comparability conditions are necessary to interpret mixed portfolios, equipment packages, and intermediary relationships consistently across the historical, base, estimated, and forecast periods?

1.2. Market Definition

Food Safety Testing Equipment covers equipment for food-safety sampling, sample preparation and handling, test incubation and culture handling, analytical measurement and reading, product safety inspection, hygiene verification, and preventive safety-condition monitoring. The study includes portable, stationary standalone, and production-line-integrated configurations; it is not confined to laboratory analyzers or direct testing of finished foods.

The included application contexts encompass food and beverage products and ingredients; agricultural, ingredient, and process water; food-contact materials and articles; and food-chain environments. Buyers extend across primary production, food and beverage manufacturing and packing, food-contact material manufacturing, distribution and logistics, retail,

foodservice, independent testing laboratories, government food-control organizations, and academic and research institutions.

The commercial boundary follows the included equipment offering rather than every business activity of a participating supplier. Upstream materials and separately supplied non-equipment reagents, software, and testing services provide value-chain context rather than independent equipment categories. Associated licensing, distribution, integration, and service relationships are relevant where they affect procurement, access, switching, or support for the included equipment.

The geographic boundary is Global within Food & Beverage. Jurisdiction-specific evidence informs interpretation within that worldwide scope rather than replacing it with a selected-country market. Participation in an adjacent business does not by itself establish an in-scope equipment capability.

1.3. Market Segmentation & Coverage

Equipment Type separates offerings by commercial function: Sampling Equipment; Sample Preparation & Handling Equipment; Test Incubation & Culture-Handling Equipment; Analytical Instruments & Test Readers; Product Safety Inspection Systems; and Safety-Condition Measurement & Monitoring Equipment. This axis retains supporting equipment, laboratory instruments, inspection systems, and preventive monitoring within the study while distinguishing their purchasing roles.

Technology Platform covers Chromatography & Electrophoresis; Mass Spectrometry; Spectroscopy & Photometry; Nucleic Acid Amplification & Sequencing, including PCR Platforms, Isothermal Amplification Platforms, and DNA Sequencing Platforms; Affinity & Biochemical Assay Platforms; Bioluminescence & Chemiluminescence; Culture-Based Microbiology; Flow Cytometry; Electrochemical Analysis; Radiometric Analysis; Optical Imaging & Machine Vision; X-Ray Imaging; Metal Detection; Physical Property Metrology; Mechanical & Fluidic Sample Handling; and Thermal Sample Conditioning. These categories describe the accepted platform identities for commercial comparison, not evidence that every platform serves every application.

Testing Objective covers Microbiological Safety Testing; Food Allergen Testing; Chemical Contaminant and Residue Testing; Radiological Contamination Testing; Physical Contaminant Inspection; Hygiene Verification; and Preventive Safety-Condition Monitoring. This axis distinguishes the buyer's safety purpose, including direct testing, inspection, verification, and prevention, without presuming that offerings addressing different purposes are substitutes.

End User covers Primary Food Producers; Food and Beverage Manufacturers and Packers; Food-Contact Material Manufacturers; Food Distribution and Logistics Businesses; Food Retailers; Foodservice Operators; Independent Testing Laboratories; Government Food-Control Organizations; and Academic and Research Institutions. The purchasing organization identifies whose qualification requirements, procurement authority, and support expectations need to be understood.

Deployment Configuration covers Portable Equipment; Stationary Standalone Equipment; and Production-Line-Integrated Equipment. This axis relates the offering to mobility, installation, and integration commitments, keeping the deployment decision distinct from the underlying analytical platform.

Sales Channel covers Direct Sales; Distributor and Reseller Sales; and Agent- and Broker-Mediated Sales. It identifies the commercial route to the buyer and the relationship through which contracting, customer access, and support responsibilities must be established.

Tested Matrix covers Food and Beverage Products and Ingredients, comprising Dairy Products and Alternatives; Fats, Oils, and Fat Emulsions; Edible Ices; Fruits, Vegetables, Nuts, and Seeds; Confectionery and Sweeteners; Cereals and Bakery Products; Meat and Poultry Products; Fish and Seafood Products; Eggs and Egg Products; Salt, Spices, Soups, Sauces, Salads, and Protein Products; Special Dietary Foods and Supplements; Non-Dairy Beverages and Packaged Drinking Water; Ready-to-Eat Savory Snacks; Prepared Meals and Composite Dishes; and Food Additives and Processing Aids. It also covers Agricultural, Ingredient, and Process Water; Food-Contact Materials and Articles; and Food-Chain Environments. This axis preserves the distinct commercial application contexts of food products, water, contact materials, and environments without expanding the study to unrelated industrial testing.

Table 1. Global Food Safety Testing Equipment Market Segmentation & Coverage

Segmentation	Coverage
Deployment Configuration	• Stationary Standalone Equipment • Production-Line-Integrated Equipment • Portable Equipment
End User	• Food and Beverage Manufacturers and Packers • Independent Testing Laboratories • Foodservice Operators • Government Food-Control Organizations • Food Retailers • Primary Food Producers • Academic and Research Institutions • Food-Contact Material Manufacturers • Food Distribution and Logistics Businesses
Equipment Type	• Analytical Instruments & Test Readers • Product Safety Inspection Systems • Safety-Condition Measurement & Monitoring Equipment • Sample Preparation & Handling Equipment • Test Incubation & Culture-Handling Equipment • Sampling Equipment
Sales Channel	• Direct Sales • Distributor and Reseller Sales • Agent- and Broker-Mediated Sales

Table 1 - continued

Segmentation	Coverage

Technology Platform	• Mass Spectrometry
	• X-Ray Imaging
	• Physical Property Metrology
	• Metal Detection
	• Mechanical & Fluidic Sample Handling
	• Chromatography & Electrophoresis
	• Thermal Sample Conditioning
	• Optical Imaging & Machine Vision
	• Nucleic Acid Amplification & Sequencing
	  o PCR Platforms
	  o Isothermal Amplification Platforms
	  o DNA Sequencing Platforms
	• Electrochemical Analysis
	• Spectroscopy & Photometry
	• Culture-Based Microbiology
	• Affinity & Biochemical Assay Platforms
	• Bioluminescence & Chemiluminescence
	• Flow Cytometry
	• Radiometric Analysis

Tested Matrix	• Food and Beverage Products and Ingredients
	  o Meat and Poultry Products
	  o Cereals and Bakery Products
	  o Dairy Products and Alternatives
	  o Fruits, Vegetables, Nuts, and Seeds
	  o Non-Dairy Beverages and Packaged Drinking Water
	  o Fish and Seafood Products
	  o Salt, Spices, Soups, Sauces, Salads, and Protein Products
	  o Confectionery and Sweeteners
	  o Prepared Meals and Composite Dishes
	  o Special Dietary Foods and Supplements
	  o Ready-to-Eat Savory Snacks
	  o Food Additives and Processing Aids
	  o Fats, Oils, and Fat Emulsions
	  o Eggs and Egg Products
	  o Edible Ices
	• Food-Chain Environments
	• Agricultural, Ingredient, and Process Water
	• Food-Contact Materials and Articles

Testing Objective	• Physical Contaminant Inspection • Chemical Contaminant and Residue Testing • Microbiological Safety Testing • Preventive Safety-Condition Monitoring • Food Allergen Testing • Hygiene Verification • Radiological Contamination Testing

Sources & Evidence

1. Technical Specifications for Equipment Used in Chemical Analysis of Food - FSSAI

   · Taxonomy evidence: The official catalog distinguishes primary analytical instruments from auxiliary equipment and covers food safety and quality together; it is not an equipment-market partition. ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/Notice_Comments_Chemical_Analysis_Food_21_10_2020_.pdf))

   · Taxonomy evidence: Its contents separately name chromatographs and agarose and vertical electrophoresis systems. Electrophoresis appears among auxiliary equipment, so safety-specific purchasing and purchased function are not established. ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/Notice_Comments_Chemical_Analysis_Food_21_10_2020_.pdf))

   · Taxonomy evidence: The catalog separately identifies PCR equipment, spectrometers, chromatographs, and an ELISA reader, supporting recognition of analytical hardware rather than consumable kits. ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/Notice_Comments_Chemical_Analysis_Food_21_10_2020_.pdf))

   · Taxonomy evidence: The auxiliary-equipment headings recognize homogenizers, centrifuges, sample-extraction hardware, and dispensing equipment. Inclusion in this market still requires food-safety attribution. ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/Notice_Comments_Chemical_Analysis_Food_21_10_2020_.pdf))

   · Taxonomy evidence: An ELISA-reader heading supports the immunoassay-reader subset, not the entire non-immunological biochemical family. ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/Notice_Comments_Chemical_Analysis_Food_21_10_2020_.pdf))

2. ISO 24914:2026 - Microbiology of the Food Chain - Loop-Mediated Isothermal Amplification (LAMP) for the Detection of Microorganisms and Associated Genetic Markers - General Requirements and Definitions

   · Taxonomy evidence: ISO xx.xx:2026 was published on January xx.xx 2026 and recognizes LAMP platforms in food-chain analysis, including human-food and food-production environmental contexts. This establishes current category recognition, not 2025 sales. ([iso.org](https://www.iso.org/standard/xx.xx.html))

   · Taxonomy evidence: The public scope distinguishes LAMP from PCR and supports retention of a separately named isothermal branch within the molecular-platform parent. ([iso.org](https://www.iso.org/standard/xx.xx.html))

3. Rapid In-Field Diagnostics: Horizon Scanning and Technology Readiness Level Study With a Technology Pilot Study - FSA Research and Evidence

   · Taxonomy evidence: The FSA-published study documents portable PCR and isothermal instrument settings in on-site food-safety work, supporting designed portability independently of buyer identity. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx-rapid-in-field-diagnostics-horizon-scanning-and-technology-readiness-level-study-with-a-technology-pilot-study))

   · Taxonomy evidence: The study recognizes instrument-based LAMP platforms in food-safety applications, adding independent deployment context without establishing routine global adoption. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx-rapid-in-field-diagnostics-horizon-scanning-and-technology-readiness-level-study-with-a-technology-pilot-study))

   · Taxonomy evidence: The publication identifies food-industry ATP luminometers and luminometer readout associated with chemiluminescence products; it does not isolate equipment-sale consideration. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx-rapid-in-field-diagnostics-horizon-scanning-and-technology-readiness-level-study-with-a-technology-pilot-study))

   · Taxonomy evidence: It distinguishes nonspecific ATP cleanliness measurements from identification of a particular microorganism, supporting the objective boundary without treating all hygiene-related tests as equivalent. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx-rapid-in-field-diagnostics-horizon-scanning-and-technology-readiness-level-study-with-a-technology-pilot-study))

   · Taxonomy evidence: Grower and agronomist interviews identify possible direct investment or service-based access, not completed farm equipment purchases. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx-rapid-in-field-diagnostics-horizon-scanning-and-technology-readiness-level-study-with-a-technology-pilot-study))

   · Taxonomy evidence: The documented irrigation-water setting establishes food-chain input-water relevance rather than packaged drinking-water testing. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx-rapid-in-field-diagnostics-horizon-scanning-and-technology-readiness-level-study-with-a-technology-pilot-study))

4. Food Code 2026 - FDA

   · Taxonomy evidence: FDA's 2026 Food Code identifies retail and foodservice as distinct food-safety operating settings. It is a model offered for jurisdictional adoption, not a uniform global purchasing requirement. ([fda.gov](https://www.fda.gov/food/fda-food-code/food-code-2026))

   · Taxonomy evidence: The 2026 model explicitly addresses retail food stores, supporting continued recognition of retail operating users without establishing instrument purchases. ([fda.gov](https://www.fda.gov/food/fda-food-code/food-code-2026))

   · Taxonomy evidence: Foodservice is separately identified in the 2026 model's scope. Current model status does not retroactively establish 2025 requirements or equipment revenue. ([fda.gov](https://www.fda.gov/food/fda-food-code/food-code-2026))

5. Food Categories - Codex GSFA
   - Taxonomy evidence: The Codex hierarchy provides recognized food descriptors, not equipment-spending segments. Adapting its categories therefore requires explicit product crosswalks. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Taxonomy evidence: The classification supplies commodity descriptors for foods and ingredients. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Taxonomy evidence: The hierarchy places soybean beverages under cereal/soybean products, while separately identifying bakery products. This prevents treating the retained combined node as a literal import of all underlying codes. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Taxonomy evidence: Bakery products are category xx.xx. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Taxonomy evidence: Soybean beverages and the main beverage category appear in different parts of the hierarchy. Assigning all non-dairy beverage-form products to one retained node is an analytical adaptation, not an official equivalence. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Taxonomy evidence: Foodstuffs are arranged in a hierarchical category system. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Taxonomy evidence: Confectionery is category xx.xx. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Taxonomy evidence: Category xx.xx covers seasonings, soups, sauces, salads, yeast, and protein products. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Taxonomy evidence: Category xx.xx separately includes infant, medical, dietetic, and supplement products. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Taxonomy evidence: Category xx.xx includes starch-based, processed-nut, and fish snacks. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
6. Dairy Products and Analogues, Excluding Products of Category 02.0 (01.0) - Codex
   - Taxonomy evidence: The official dairy descriptor recognizes dairy products and a defined analog subset involving replacement of milk fat. It does not establish that every commercially described dairy alternative belongs to this official category. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=b272ded6-249a-f111-b8dc-70a8a5613865))
   - Taxonomy evidence: Food category xx.xx recognizes dairy products and defined analogs while excluding category xx.xx fat products. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=b272ded6-249a-f111-b8dc-70a8a5613865))
7. Beverages, Excluding Dairy Products (14.0) - Codex
   - Taxonomy evidence: The official beverage descriptor recognizes alcoholic and nonalcoholic beverages and places dairy-based beverages in the dairy category. This supports a beverage-versus-dairy distinction but not a complete equipment-market allocation. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=a073ded6-249a-f111-b8dc-70a8a5613865))
   - Taxonomy evidence: Food category xx.xx distinguishes alcoholic and nonalcoholic beverages from dairy-based beverages, which remain in category xx.xx. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=a073ded6-249a-f111-b8dc-70a8a5613865))

8. Frequently Asked Questions - Wholesale - U.S. Census Bureau
   - Taxonomy evidence: Census distinguishes manufacturer-affiliated selling, own-account merchandise resale, agency transactions, and electronic intermediation. Ordering medium alone therefore does not establish the economic channel. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
   - Taxonomy evidence: Manufacturer sales branches or offices are defined by ownership or corporate affiliation, supporting treatment of controlled selling organizations as direct rather than independent resale. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
   - Taxonomy evidence: Manufacturer sales branches or offices are defined through ownership or corporate affiliation with the manufacturer, supporting their treatment as owned selling rather than independent distribution. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
   - Taxonomy evidence: Merchant distributors purchase merchandise from unrelated manufacturers and sell it to customers, supporting an own-account resale distinction. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
   - Taxonomy evidence: Merchant wholesalers buy merchandise on their own account, while distributors and importers are distinguished by their commercial activity rather than ordering medium. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
   - Taxonomy evidence: Agency roles and fee-based electronic markets are recognized separately from own-account dealing. These general roles do not establish exact-market participation or channel shares. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
9. Legislation - Food-Contact Materials - European Commission
   - Taxonomy evidence: The Commission identifies migration assessment and compliance documentation within food-contact-material safety. This supports a material-safety matrix distinct from surface contamination. ([food.ec.europa.eu](https://food.ec.europa.eu/food-safety/chemical-safety/food-contact-materials/legislation_en))
   - Taxonomy evidence: Manufacturer responsibilities and supporting compliance documentation are established, but the page does not establish manufacturers' ownership of testing instruments rather than outsourced laboratory use. ([food.ec.europa.eu](https://food.ec.europa.eu/food-safety/chemical-safety/food-contact-materials/legislation_en))
   - Taxonomy evidence: Food-contact chemical migration is a recognized safety-compliance subject, supporting its inclusion within chemical-safety testing rather than packaging-production activity. ([food.ec.europa.eu](https://food.ec.europa.eu/food-safety/chemical-safety/food-contact-materials/legislation_en))

10. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods - Food Standards Agency

- Taxonomy evidence: The commissioned review's commercial cost section separately identifies plate readers, PCR instruments, LC-MS instruments, consumables, and service-related costs, supporting hardware-only accounting. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Taxonomy evidence: Quote-based hardware discussion identifies plate readers, real-time PCR instruments, and LC-MS instruments separately from common support equipment. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Taxonomy evidence: Different analytical platforms are treated as distinct hardware investments. Their differing costs do not establish comparable market-wide price/quality tiers. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Taxonomy evidence: The FSA-commissioned review distinguishes ELISA, PCR, and LC-MS food-allergen technologies and separates associated hardware from consumables and testing fees. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Taxonomy evidence: The commercial comparison identifies PCR instrumentation independently of plate-reader and LC-MS hardware. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Taxonomy evidence: The food-allergen hardware comparison includes real-time PCR instruments. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Taxonomy evidence: LC-MS equipment is identified as a separate hardware investment; this supports platform recognition, not a global revenue allocation. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Taxonomy evidence: Identifies LC-MS hardware as distinct from immunoassay-reader and PCR equipment. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Taxonomy evidence: The cost assessment concerns an established testing-service laboratory, providing an external laboratory acquisition setting without measuring its food-safety-only capital spending. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Taxonomy evidence: Documents ELISA and lateral-flow food-allergen testing, with plate-reader hardware identified for ELISA. This does not establish the non-immunological biochemical portion. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))

11. ISO 19036:2019 - Microbiology of the Food Chain - Estimation of Measurement Uncertainty for Quantitative Determinations

- Taxonomy evidence: The current public scope separately recognizes colony-count and MPN approaches within food-chain quantitative microbiology, supporting the culture-based category without defining equipment sales. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))
- Taxonomy evidence: Recognizes colony-count and MPN approaches, supporting a separate culture-based enumeration family. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))
- Taxonomy evidence: Flow cytometry is explicitly recognized as a food-chain instrumental approach, supporting category recognition but not food-safety-attributable purchasing volumes. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))
- Taxonomy evidence: Explicitly recognizes flow cytometry among food-chain microbiology instrumental approaches. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))
- Taxonomy evidence: ATP measurement remains recognized in the public food-chain scope; this supports the ATP-linked subset rather than every chemiluminescence platform. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))
- Taxonomy evidence: Explicitly recognizes ATP measurement in food-chain analysis. This supports the ATP-linked portion, not every chemiluminescence platform. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))
- Taxonomy evidence: The scope distinguishes colony-count/MPN, impediometry, ATP, flow cytometry, and qPCR approaches in food-chain analysis, without defining an exhaustive equipment market. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))

12. Environmental Sampling - FDA

- Taxonomy evidence: FDA distinguishes environmental contamination on food-contact and non-food-contact surfaces from product sampling. This directly supports the surface-contamination subset, not every airborne or condition-monitoring use.
([fda.gov](https://www.fda.gov/food/sampling-protect-food-supply/environmental-sampling))

- Taxonomy evidence: FDA distinguishes food-production environmental samples from product samples and recognizes both food-contact and non-food-contact surfaces. This directly supports the surface-contamination portion of the environmental matrix, not every proposed environmental-monitoring use.
([fda.gov](https://www.fda.gov/food/sampling-protect-food-supply/environmental-sampling))

- Taxonomy evidence: Environmental samples may be assessed for named microbial hazards. Their environmental location does not make the testing objective nonspecific hygiene verification.
([fda.gov](https://www.fda.gov/food/sampling-protect-food-supply/environmental-sampling))

13. Standard Specifications for Setting Up of a Basic Functional Food Analysis Laboratory

- Taxonomy evidence: Annexure I distinguishes chemical-analysis, microbiology, and supporting equipment. Its Indian food-laboratory scope includes safety and quality; it is not a global market partition or blanket inclusion rule.
([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))

- Taxonomy evidence: Lists chromatographs, ICP-MS, spectrophotometers, an ELISA reader, and a digital colony counter as food-laboratory instruments.
([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))

- Taxonomy evidence: Lists homogenizers, grinding mills, centrifuges, pipettes, evaporators, and microwave digestion systems among supporting equipment.
([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))

- Taxonomy evidence: Names gas, high-performance liquid, and ion chromatographs; it does not establish the electrophoresis portion.
([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))

- Taxonomy evidence: Includes inductively coupled plasma mass-spectrometric equipment.
([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))

- Taxonomy evidence: Names atomic-absorption, FT-IR, fluorescence, and UV-visible instruments.
([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))

- Taxonomy evidence: Lists pH, conductivity/TDS, and Karl Fischer coulometric instruments.
([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))

- Taxonomy evidence: Lists analytical balances, thermohygrometers, and water-activity meters.
([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))

- Taxonomy evidence: Includes digital colony-counting equipment within its microbiology instrument list.
([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))

14. ISO 7218:2024 - Microbiology of the Food Chain - General Requirements and Guidance for Microbiological Examinations, Public Preview

    · Taxonomy evidence: Equipment headings distinguish incubators and controlled heating equipment from inoculation hardware, including spiral platers. ([webstore.ansi.org](https://webstore.ansi.org/preview-pages/iso/preview_iso%252B7218-2024.pdf))

    · Taxonomy evidence: Separately recognizes pipettors, diluters, homogenizers, centrifuges, and filtration/separation equipment. ([webstore.ansi.org](https://webstore.ansi.org/preview-pages/iso/preview_iso%252B7218-2024.pdf))

    · Taxonomy evidence: Its equipment classification recognizes mechanical homogenization, dispensing, centrifugal separation, and filtration hardware. ([webstore.ansi.org](https://webstore.ansi.org/preview-pages/iso/preview_iso%252B7218-2024.pdf))

    · Taxonomy evidence: Recognizes incubators, controlled baths, and heating blocks as temperature-controlled equipment categories. ([webstore.ansi.org](https://webstore.ansi.org/preview-pages/iso/preview_iso%252B7218-2024.pdf))

    · Taxonomy evidence: Distinguishes temperature-monitoring devices and balances/gravimetric diluters in its equipment headings. ([webstore.ansi.org](https://webstore.ansi.org/preview-pages/iso/preview_iso%252B7218-2024.pdf))

15. ISO 22174:2024 - Microbiology of the Food Chain - Polymerase Chain Reaction (PCR) for the Detection and Quantification of Microorganisms - General Requirements and Definitions

    · Taxonomy evidence: Public scope establishes PCR as a named food-chain analytical platform applicable to human food and food-production environmental samples. ([iso.org](https://www.iso.org/standard/xx.xx.html))

    · Taxonomy evidence: Provides independent food-chain recognition for the PCR amplification portion of the molecular-platform parent. ([iso.org](https://www.iso.org/standard/xx.xx.html))

16. ISO 24914 - Microbiology of the Food Chain - Loop-Mediated Isothermal Amplification (LAMP) for the Detection of Microorganisms - Public Scope

    · Taxonomy evidence: The public scope recognizes LAMP as a food-chain detection platform and distinguishes its general requirements from those for PCR. No operating guidance is reproduced. ([iso.org](https://www.iso.org/obp/ui?_escaped_fragment_=iso%3Astd%3Aiso%3A24914%3Aed-xx.xx%3Av1%3Aen))

    · Taxonomy evidence: Supports inclusion of a separately named isothermal-amplification branch within the molecular-platform parent, without establishing current product sales or authorization. ([iso.org](https://www.iso.org/obp/ui?_escaped_fragment_=iso%3Astd%3Aiso%3A24914%3Aed-xx.xx%3Av1%3Aen))

17. TechTalk Podcast Episode 2: Whole Genome Sequencing in the New Era of Smarter Food Safety

    · Taxonomy evidence: Describes whole-genome sequencing in food-safety surveillance and facility investigations, establishing a food-safety use category rather than universal industry adoption. ([fda.gov](https://www.fda.gov/food/new-era-smarter-food-safety-techtalk-podcast/techtalk-podcast-episode-xx.xx-whole-genome-sequencing-new-era-smarter-food-safety))

    · Taxonomy evidence: Supports sequencing as a distinct analytical-platform branch alongside amplification within the molecular parent. ([fda.gov](https://www.fda.gov/food/new-era-smarter-food-safety-techtalk-podcast/techtalk-podcast-episode-xx.xx-whole-genome-sequencing-new-era-smarter-food-safety))

18. BRCGS Global Standard Food Safety, Issue 9
    - Taxonomy evidence: Section xx.xx recognizes food foreign-body detection equipment, including metal-detection, X-ray, and optical systems. Its broader removal-equipment coverage is not imported into this taxonomy. ([nifcc.co.uk](https://www.nifcc.co.uk/site/wp-content/uploads/2023/xx.xx/BRCGS_Food_Safety_Standard_Issue_9.pdf))
    - Taxonomy evidence: Recognizes optical sorting equipment for final-product testing; only identifiable in-scope sensing/inspection hardware is allocated here, not an entire processing installation. ([nifcc.co.uk](https://www.nifcc.co.uk/site/wp-content/uploads/2023/xx.xx/BRCGS_Food_Safety_Standard_Issue_9.pdf))
    - Taxonomy evidence: Explicitly identifies X-ray inspection equipment as a food foreign-body detection category. ([nifcc.co.uk](https://www.nifcc.co.uk/site/wp-content/uploads/2023/xx.xx/BRCGS_Food_Safety_Standard_Issue_9.pdf))
    - Taxonomy evidence: Identifies metal detectors separately from X-ray equipment and passive magnets. ([nifcc.co.uk](https://www.nifcc.co.uk/site/wp-content/uploads/2023/xx.xx/BRCGS_Food_Safety_Standard_Issue_9.pdf))
19. HACCP Principles & Application Guidelines
    - Taxonomy evidence: Distinguishes hazard testing from monitoring temperature, time, pH, and moisture, supporting a separate safety-condition measurement role. ([fda.gov](https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines))
    - Taxonomy evidence: Identifies physical measurements, including temperature, time, and moisture, as food-safety monitoring activities. ([fda.gov](https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines))
    - Taxonomy evidence: The guidance distinguishes biological, chemical and physical hazards and addresses monitoring and verification, providing a high-level foundation for an objective-based partition. The proposed taxonomy is an analytical adaptation, not an official FDA segmentation. ([fda.gov](https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines))
    - Taxonomy evidence: Physical hazards include foreign materials such as stones, glass and metal, and the guidance identifies metal detectors among product-safety devices. This supports foreign-body inspection as a distinct safety purpose. ([fda.gov](https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines))
    - Taxonomy evidence: The guidance recognizes monitoring of time, temperature, pH and moisture, and identifies water activity as a safety-relevant intrinsic food characteristic. These are control-condition measurements rather than direct hazard assays. ([fda.gov](https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines))
    - Taxonomy evidence: Its chemical-hazard examples include aflatoxin and antibiotic or pesticide residues, supporting classification of toxin and residue measurement by the chemical target rather than its origin. ([fda.gov](https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines))
20. Dairy Plant - Milk Sample Collector Evaluation Record
    - Taxonomy evidence: The historical dairy-plant record recognizes sample-transfer instruments and in-line samplers, establishing a durable sampling-hardware role rather than current model availability. ([fda.gov](https://www.fda.gov/files/about%20fda/published/Dairy-Plant---Milk-Sample-Collector-Evaluation-Record-%28PDF%xx.xx.pdf))
21. Total Diet Study Report: Fiscal Years 2018-2020 Radionuclides Data
    - Taxonomy evidence: Reports food-sample analysis using high-purity germanium gamma spectrometry and gas-flow proportional counting, supporting radiometric analysis rather than irradiation-processing equipment. ([fda.gov](https://www.fda.gov/media/xx.xx/download))

22. Water Activity (aw) in Foods

- Taxonomy evidence: The historical equipment discussion identifies hygrometric instruments for assessing food water activity; it does not establish current models or installations. ([fda.gov](https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/inspection-technical-guides/water-activity-aw-foods))
- Taxonomy evidence: Provides a food-safety-linked measurement role for water-activity equipment, distinct from the machinery used to process or preserve food. ([fda.gov](https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/inspection-technical-guides/water-activity-aw-foods))

23. Laboratory development | FAO

- Taxonomy evidence: FAO distinguishes preventive process controls from sampling and testing used to verify food-safety controls, supporting separation of direct testing and verification objectives without treating them as identical activities. ([fao.org](https://www.fao.org/food-safety/food-control-systems/laboratory-development/en))
- Taxonomy evidence: FAO describes national authorities, private-sector engagement, laboratory management, universities and research centers within food-control laboratory development. These are operating and institutional roles, not an exhaustive equipment-buyer classification. ([fao.org](https://www.fao.org/food-safety/food-control-systems/laboratory-development/en))

24. Compendium of Microbiological Criteria for Food | Food Standards Australia New Zealand

- Taxonomy evidence: The compendium recognizes pathogens and indicator organisms as food-safety testing targets and covers food-production environmental monitoring. ([foodstandards.gov.au](https://www.foodstandards.gov.au/sites/default/files/publications/Documents/Compendium_revised%20Dec%xx.xx.pdf))
- Taxonomy evidence: It distinguishes rapid ATP and protein cleanliness checks from tests determining whether target microorganisms are present. ([foodstandards.gov.au](https://www.foodstandards.gov.au/sites/default/files/publications/Documents/Compendium_revised%20Dec%xx.xx.pdf))
- Taxonomy evidence: The dairy chapter recognizes in-house laboratories alongside external commercial laboratories, establishing a captive testing setting within food processing. ([foodstandards.gov.au](https://www.foodstandards.gov.au/sites/default/files/publications/Documents/Compendium_revised%20Dec%xx.xx.pdf))
- Taxonomy evidence: External accredited commercial laboratories are separately recognized as providers of food-industry testing. ([foodstandards.gov.au](https://www.foodstandards.gov.au/sites/default/files/publications/Documents/Compendium_revised%20Dec%xx.xx.pdf))

25. Food Allergies | FDA

- Taxonomy evidence: FDA treats undeclared allergens and allergen cross-contact as food-safety concerns and describes food-allergen testing using several analytical platforms. This supports a distinct allergen objective independent of technology. ([fda.gov](https://www.fda.gov/food/nutrition-food-labeling-and-critical-foods/food-allergies))
- Taxonomy evidence: The page addresses allergen controls during food manufacturing and packaging, establishing these facilities as distinct operating settings for allergen-safety programs without quantifying their equipment purchases. ([fda.gov](https://www.fda.gov/food/nutrition-food-labeling-and-critical-foods/food-allergies))

26. Chemical Contaminants & Pesticides | FDA

- Taxonomy evidence: FDA describes food testing for chemical contaminants and pesticide residues and distinguishes environmental contaminants, process contaminants and natural toxins. Its environmental examples include toxic elements and industrial chemicals; radionuclides are also listed administratively but are separated in the proposed taxonomy. ([fda.gov](https://www.fda.gov/food/chemical-contaminants-pesticides))

27. FDA Response to the Fukushima Daiichi Nuclear Power Facility Incident | FDA

· Taxonomy evidence: FDA describes routine radionuclide surveillance, laboratory measurement of radioactive contamination in food and public food-testing network capabilities. It also identifies radiation-detection equipment used for food-import screening. These establish the testing category, not equipment-market revenue.
([fda.gov](https://www.fda.gov/news-events/public-health-focus/fda-response-fukushima-daiichi-nuclear-power-facility-incident))

28. Legislation - Food Safety - European Commission

· Taxonomy evidence: The Commission identifies chemical migration testing as part of food-contact-material safety compliance, establishing an application connected to human-food chemical safety rather than packaging production.
([food.ec.europa.eu](https://food.ec.europa.eu/food-safety/chemical-safety/food-contact-materials/legislation_en?prefLang=es))

· Taxonomy evidence: Food-contact compliance documentation and declarations are linked to manufacturers' responsibilities. This supports a distinct manufacturer compliance setting, but does not establish whether manufacturers own testing equipment or outsource the work.
([food.ec.europa.eu](https://food.ec.europa.eu/food-safety/chemical-safety/food-contact-materials/legislation_en?prefLang=es))

29. UNSD - Classification Detail: ISIC Rev. 4, Code 10

· Taxonomy evidence: ISIC Rev. xx.xx Division xx.xx distinguishes transformation of agricultural and fishery products into food from minimal handling classified as wholesale or retail. The proposed human-food boundary excludes the classification's animal-feed activities.
([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Detail/EN/xx.xx/xx.xx))

30. UNSD - Classification Detail: ISIC Rev. 4, Code 11

· Taxonomy evidence: ISIC Rev. xx.xx Division xx.xx separately recognizes beverage manufacturing, including nonalcoholic beverages and mineral water, supporting inclusion of beverage producers alongside food manufacturers. ([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Detail/EN/xx.xx/xx.xx))

31. FSMA Final Rule on Sanitary Transportation of Human and Animal Food | FDA

· Taxonomy evidence: FDA's sanitary-transportation framework distinguishes shippers, loaders, carriers and receivers and addresses contamination prevention and temperature control. Responsibility can depend on agreements, so a transportation role alone does not identify the equipment purchaser or operator.
([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-sanitary-transportation-human-and-animal-food))

32. UNSD - Classification Detail: ISIC Rev. 4, Code 4630

· Taxonomy evidence: ISIC Rev. xx.xx Code xx.xx recognizes food and beverage wholesale as a commercial activity distinct from manufacturing and retail. Only its human-food and beverage activities fit the proposed market boundary. ([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Detail/EN/xx.xx/xx.xx))

33. FDA Food Code | FDA

· Taxonomy evidence: FDA identifies grocery stores within the retail segment addressed by its Food Code, establishing a professional retail food-safety operating setting. The Food Code is a model, not a uniform worldwide requirement. ([fda.gov](https://www.fda.gov/food/retail-food-protection/fda-food-code))

· Taxonomy evidence: The same model addresses restaurants and institutional foodservice, including institutions such as nursing homes, supporting a foodservice category separate from retail.
([fda.gov](https://www.fda.gov/food/retail-food-protection/fda-food-code))

34. 2022 FDA Food Code - Print Version

- Taxonomy evidence: The model includes provision of food-temperature measuring devices, supporting a professional equipment-use setting relevant to covered retail establishments rather than only laboratory testing. ([fda.gov](https://www.fda.gov/media/xx.xx/download))

- Taxonomy evidence: Its equipment provisions establish temperature-measurement and sanitation-verification needs relevant to foodservice operations, without establishing actual purchasing volumes. ([fda.gov](https://www.fda.gov/media/xx.xx/download))

- Taxonomy evidence: Food-temperature measuring devices are recognized as monitoring equipment for food-safety conditions. Only separately attributable in-scope hardware qualifies under the working equipment boundary. ([fda.gov](https://www.fda.gov/media/xx.xx/download))

- Taxonomy evidence: The model recognizes devices for checking sanitation conditions. This supports the verification objective, not inclusion of disposable test supplies or cleaning machinery. ([fda.gov](https://www.fda.gov/media/xx.xx/download))

35. UNSD - Classification Detail: ISIC Rev. 4, Code 7120

- Taxonomy evidence: ISIC Rev. xx.xx Code xx.xx recognizes technical testing and analysis, including food-hygiene testing. It provides an economic-activity basis for distinguishing external testing businesses from captive food-industry laboratories; it does not measure their equipment spending. ([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Detail/EN/xx.xx/xx.xx))

36. 4. Elements of a National Food Control System | FAO

- Taxonomy evidence: FAO describes food-control laboratories under national and subnational authorities, central reference-laboratory functions and investment in analytical facilities and instruments. This establishes government food-control organizations as equipment-operating institutions, not merely funders. ([fao.org](https://www.fao.org/xx.xx/y8705e/y8705e04.htm))

37. Equipment Grants Program | NIFA

- Taxonomy evidence: The equipment-grant program identifies higher-education and cooperative research institutions as recipients able to acquire shared special-purpose instruments for food and agricultural science. This establishes an institutional acquisition route, not a food-safety-only expenditure allocation. ([nifa.usda.gov](https://www.nifa.usda.gov/grants/funding-opportunities/equipment-grants-program))

38. Activities: Projects : LMD

- Taxonomy evidence: The public project listing identifies a university equipment-acquisition project expressly linking an analytical instrument with food-safety research. The listing establishes an acquisition-project setting, not current deployment or wholly food-safety-attributable instrument revenue. ([training-portal.nifa.usda.gov](https://training-portal.nifa.usda.gov/lmdr/projects?agency=NIFA&page=xx.xx&sort=title&source=creems_priv&state=&type=O))

39. FSMA Final Rule on Produce Safety | FDA

- Taxonomy evidence: FDA's produce-safety framework addresses food-safety testing and environmental controls at covered farm and sprout operations. It establishes primary-production testing relevance, but does not demonstrate that farms purchase durable instruments rather than use external laboratories. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-produce-safety))

40. Request for Proposal for Setting Up of Mobile Food Testing Laboratory (MFTL) - FSSAI

- Taxonomy evidence: The April 2017 mobile food-testing laboratory procurement includes handheld measurement equipment, establishing a public procurement context for portable instruments. The complete vehicle package is not equipment-only market revenue. ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/RFP_Mobile_Food_Testing_Lab_21_04_2017.pdf))

- Taxonomy evidence: The procurement distinguishes manufacturer bidders and OEM dealers, providing food-laboratory-specific evidence of different supplier roles without establishing channel shares or transaction-level ownership. ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/RFP_Mobile_Food_Testing_Lab_21_04_2017.pdf))

41. Guidance Document for Setting Up of a Basic Functional Food Analysis Laboratory - FSSAI

- Taxonomy evidence: The 2021 food-analysis laboratory guidance identifies benchtop instruments and fixed laboratory installations. It supports stationary equipment configurations, not blanket inclusion of every listed laboratory asset. ([fssai.gov.in](https://fssai.gov.in/upload/uploadfiles/files/Book_Food_Testing_22_12_2021.pdf))

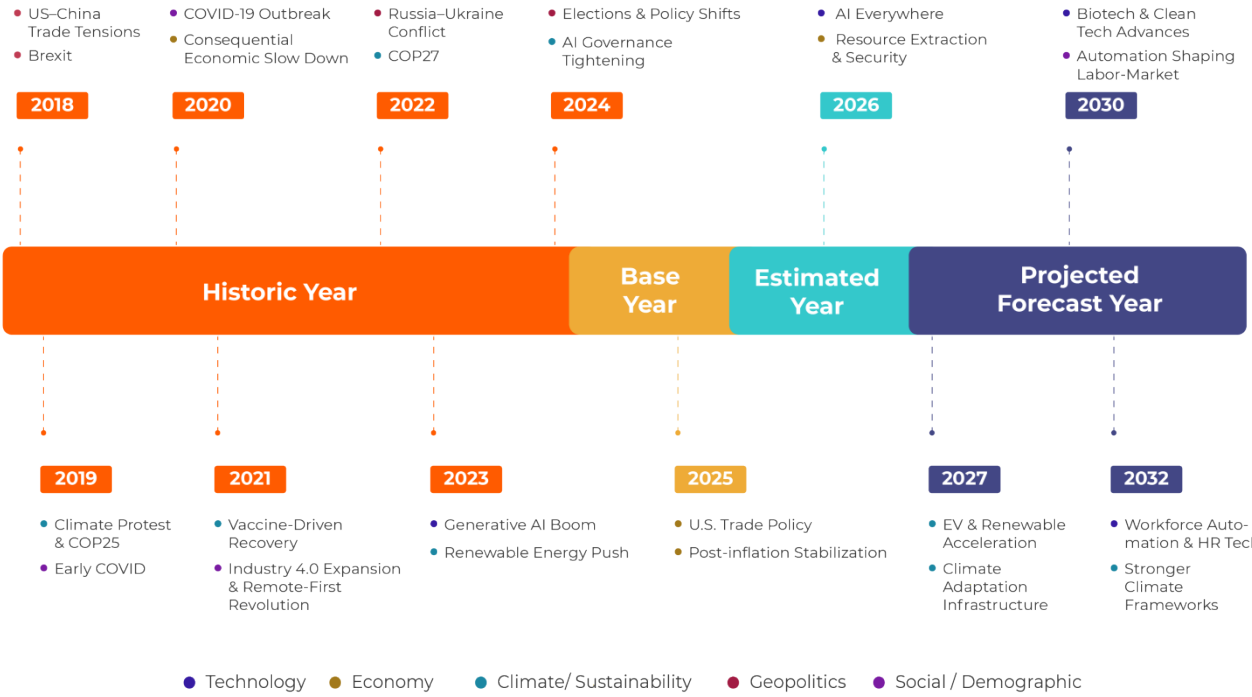
42. Food inspection technology - Food Science and Technology
    - Taxonomy evidence: The professional article describes food inspection systems installed on production lines for real-time assessment, including physical-contamination inspection. This independently supports an integrated deployment distinction.
    ([academic.oup.com](https://academic.oup.com/fst/article/xx.xx/xx.xx/xx.xx/xx.xx))
    - Taxonomy evidence: Production-line installation is a documented physical deployment distinction, separate from the underlying inspection technology.
    ([academic.oup.com](https://academic.oup.com/fst/article/xx.xx/xx.xx/xx.xx/xx.xx))
43. ISIC, Rev. 4 - Code 46: Wholesale trade, except of motor vehicles and motorcycles - UNSD
    - Taxonomy evidence: ISIC Revision xx.xx distinguishes own-account wholesale trade, manufacturer-maintained sales organizations, and commission-based intermediation. These are international commercial-role anchors, not food-safety-equipment market-share estimates.
    ([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Structure/Detail/en/xx.xx/xx.xx))
    - Taxonomy evidence: The classification identifies merchant wholesalers, including industrial distributors, as businesses taking title to the goods sold.
    ([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Structure/Detail/en/xx.xx/xx.xx))
    - Taxonomy evidence: The classification separately recognizes agents, brokers, and commission trade. This establishes a commercial role but not its exact-market prevalence.
    ([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Structure/Detail/en/xx.xx/xx.xx))
44. 2022 NAICS Definition: 425120 Wholesale Trade Agents and Brokers - U.S. Census Bureau
    - Taxonomy evidence: Agents and brokers arrange goods transactions without taking title and receive commissions or fees; the definition also covers electronic intermediation. It does not establish food-safety-equipment sales volumes.
    ([census.gov](https://www.census.gov/naics/?details=xx.xx&input=xx.xx&year=2022))
45. Fats and oils, and fat emulsions (02.0) - Codex
    - Taxonomy evidence: Food category xx.xx encompasses fat-based products from vegetable, animal, marine, or mixed sources.
    ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=d872ded6-249a-f111-b8dc-70a8a5613865))
46. Edible ices, including sherbet and sorbet (03.0) - Codex
    - Taxonomy evidence: Food category xx.xx covers water-based frozen desserts and confections and distinguishes them from primarily dairy frozen desserts.
    ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=e472ded6-249a-f111-b8dc-70a8a5613865))
47. Fruits and vegetables, seaweeds, and nuts and seeds (04.0) - Codex
    - Taxonomy evidence: Food category xx.xx recognizes fresh and processed produce and includes fungi, roots, legumes, seaweeds, nuts, and seeds.
    ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=e572ded6-249a-f111-b8dc-70a8a5613865))
48. Sweeteners, including honey (11.0) - Codex
    - Taxonomy evidence: Food category xx.xx recognizes sugars, sweetener products, and honey, supporting the sweetener portion of the combined commodity group.
    ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=6e73ded6-249a-f111-b8dc-70a8a5613865))
49. Cereals and cereal products, excluding bakery wares (06.0) - Codex
    - Taxonomy evidence: Food category xx.xx includes unprocessed and processed cereal products and distinguishes bakery category xx.xx; the proposed node combines these two explicit groups.
    ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=1773ded6-249a-f111-b8dc-70a8a5613865))
50. Meat and meat products, including poultry and game (08.0) - Codex
    - Taxonomy evidence: Food category xx.xx covers fresh and processed meat, poultry, and game products.
    ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=4073ded6-249a-f111-b8dc-70a8a5613865))

51. Fish and fish products, including mollusks, crustaceans, and echinoderms (09.0) - Codex
    - Taxonomy evidence: Food category xx.xx recognizes fresh and processed aquatic food products, including mollusks and crustaceans. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=5373ded6-249a-f111-b8dc-70a8a5613865))
52. Eggs and egg products (10.0) - Codex
    - Taxonomy evidence: Food category xx.xx separately recognizes fresh eggs and egg products. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=6673ded6-249a-f111-b8dc-70a8a5613865))
53. Prepared foods (16.0) - Codex
    - Taxonomy evidence: The prepared-food descriptor recognizes multi-component foods requiring limited consumer preparation. The proposed category uses that positive product definition rather than a generic unmatched-food remainder. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=c673ded6-249a-f111-b8dc-70a8a5613865))
54. Joint FAO/WHO Expert Committee on Food Additives (JECFA) - FAO
    - Taxonomy evidence: JECFA's public mandate includes safety assessment of food additives, flavoring agents, and processing aids, and development of food-additive specifications. This supports material identity and safety relevance, not equipment spending. ([fao.org](https://www.fao.org/food-safety/scientific-advice/jecfa/))
55. Safe water saves water - FAO
    - Taxonomy evidence: FAO describes food-safety considerations for water used throughout food production and processing and distinguishes suitability by intended use. This supports a food-chain input-water matrix distinct from beverage products. ([fao.org](https://www.fao.org/newsroom/story/Safe-water-saves-water/))
56. Food Packaging & Other Substances that Come in Contact with Food - Information for Consumers - FDA
    - Taxonomy evidence: FDA explains that food-contact substance safety review considers testing data on migration into food and consumer exposure. This establishes contact materials as a distinct safety-assessment subject. ([fda.gov](https://www.fda.gov/food/food-ingredients-packaging/food-packaging-other-substances-come-contact-food-information-consumers))

1.4. Years Considered for the Study

The historical year is 2024, the base year is 2025, the estimated year is 2026, and the forecast year is 2032. These roles distinguish historical and base-year evidence from estimated and forward-looking interpretation.

Figure 1. Global Food Safety Testing Equipment Market, Years Considered for the Study



1.5. Currency Considered for the Study

The reporting currency is United States dollars (USD). Monetary reporting uses absolute USD amounts.

1.6. Language Considered for the Study

The publication language is American English.

1.7. Key Stakeholders

- Equipment manufacturers and platform owners: Decisions about offering scope, documented application coverage, licensing, commercialization, integration commitments, and the support needed to qualify for buyer consideration.
- Distributors, resellers, agents, and brokers: Decisions about territorial rights, customer access, contracting responsibilities, service obligations, and the commercial distinction between representation and control of an equipment offering.
- Primary Food Producers; Food and Beverage Manufacturers and Packers; Food-Contact Material Manufacturers: Decisions about relevant equipment, supplier qualification, deployment fit, integration, switching exposure, and internal ownership versus external testing.
- Food Distribution and Logistics Businesses; Food Retailers; Foodservice Operators: Decisions about equipment suited to their safety responsibilities, operating locations, service requirements, and procurement authority.

- Independent Testing Laboratories: Decisions about equipment portfolios, application coverage, customer acceptance requirements, supplier support, and differentiation of equipment investment from the testing services sold to clients.
- Government Food-Control Organizations and relevant recognition bodies: Decisions concerning equipment procurement, the scope of applicable recognition or authorization, and the distinction between formal status and commercial adoption.
- Academic and Research Institutions: Decisions about food-safety equipment relevance, procurement suitability, application breadth, and continuing supplier support without extending the study to unrelated research equipment.
- Investors and strategic acquirers: Decisions about evidenced commercial participation, control of offerings and channels, buyer access conditions, portfolio comparability, and obligations that could constrain an investment thesis.

2. Research Methodology

2.1. Introduction

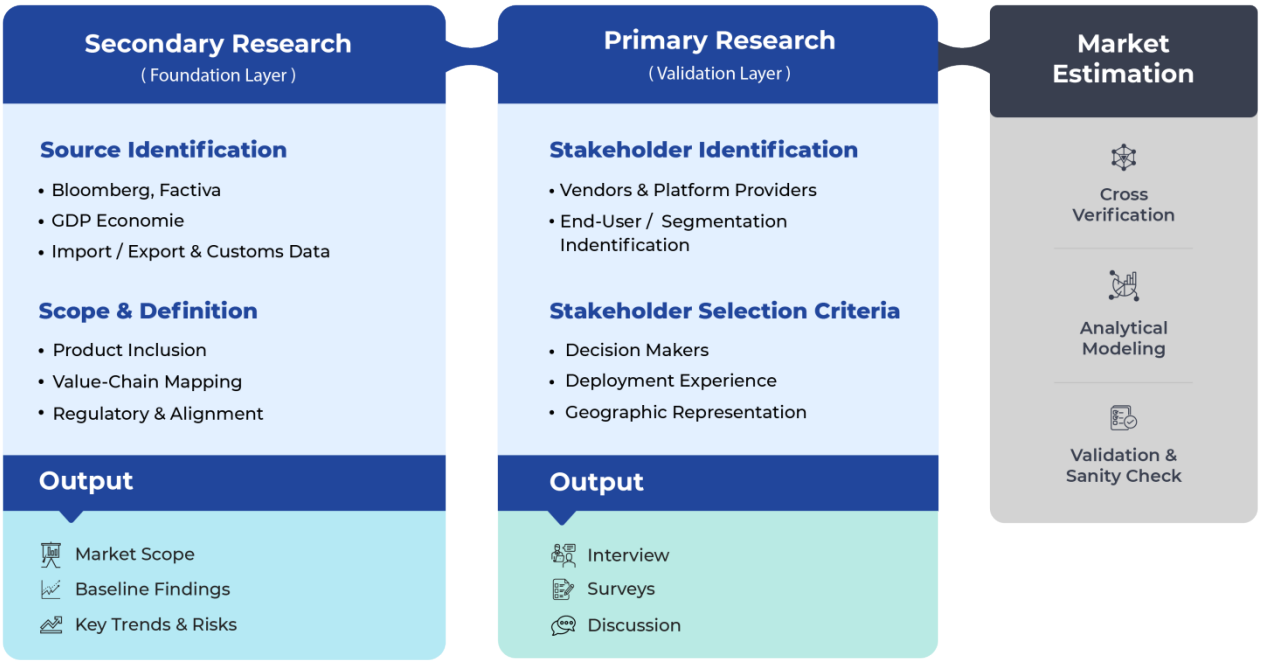
The study approaches Food Safety Testing Equipment as an equipment-purchasing and market-access question within the Global scope. Its purpose is to relate documented offerings and commercial relationships to buyer requirements while separating observed business conditions from economic interpretation and conditional expectations. Analyst-led primary research provides a qualitative challenge layer alongside claim-specific secondary evidence.

2.2. Research Design

Comparisons concern an included equipment offering in a defined food-safety application and commercial setting, rather than a supplier's entire portfolio. Meaningful comparison requires alignment across equipment function, technology, testing objective, tested matrix, buyer, deployment, sales channel, geography, and period. This alignment prevents a broad capability claim from becoming an unsupported conclusion about commercial access or competitiveness.

Buyer qualification, recognition, licensing, distribution, and support are separate questions. Establishing a product identity does not settle these other conditions; a proposed commercial option remains conditional where its relevant access or delivery requirements have not been established.

Figure 2. Global Food Safety Testing Equipment Market, Research Design



2.2.1. Primary Research

The analyst team conducted primary research as a qualitative challenge layer for market definition, segmentation, demand conditions, adoption barriers, and competitive interpretation. This work tested analytical assumptions and sharpened explanations of market mechanisms without serving as standalone support for numerical estimates.

The qualitative challenge layer is evaluated alongside secondary evidence within the accepted market scope. It informs conditional market explanations and hypotheses for subsequent quantitative analysis. Numerical estimates require their own supporting evidence, and a forecast derived from a qualitative assumption does not independently validate that assumption. Final interpretation must reconcile the qualitative findings with the completed quantitative results.

2.2.2. Secondary Research

Source roles are claim-specific. Official company portfolios can establish advertised offerings; company filings can establish disclosed business facts within their reporting boundaries; regulatory and recognition records can establish the status they expressly confer within their stated scope. Licensing, distribution, and purchasing records can support the respective commercial relationship or requirement. These records answer different questions and are not interchangeable proof of availability, buyer acceptance, or adoption.

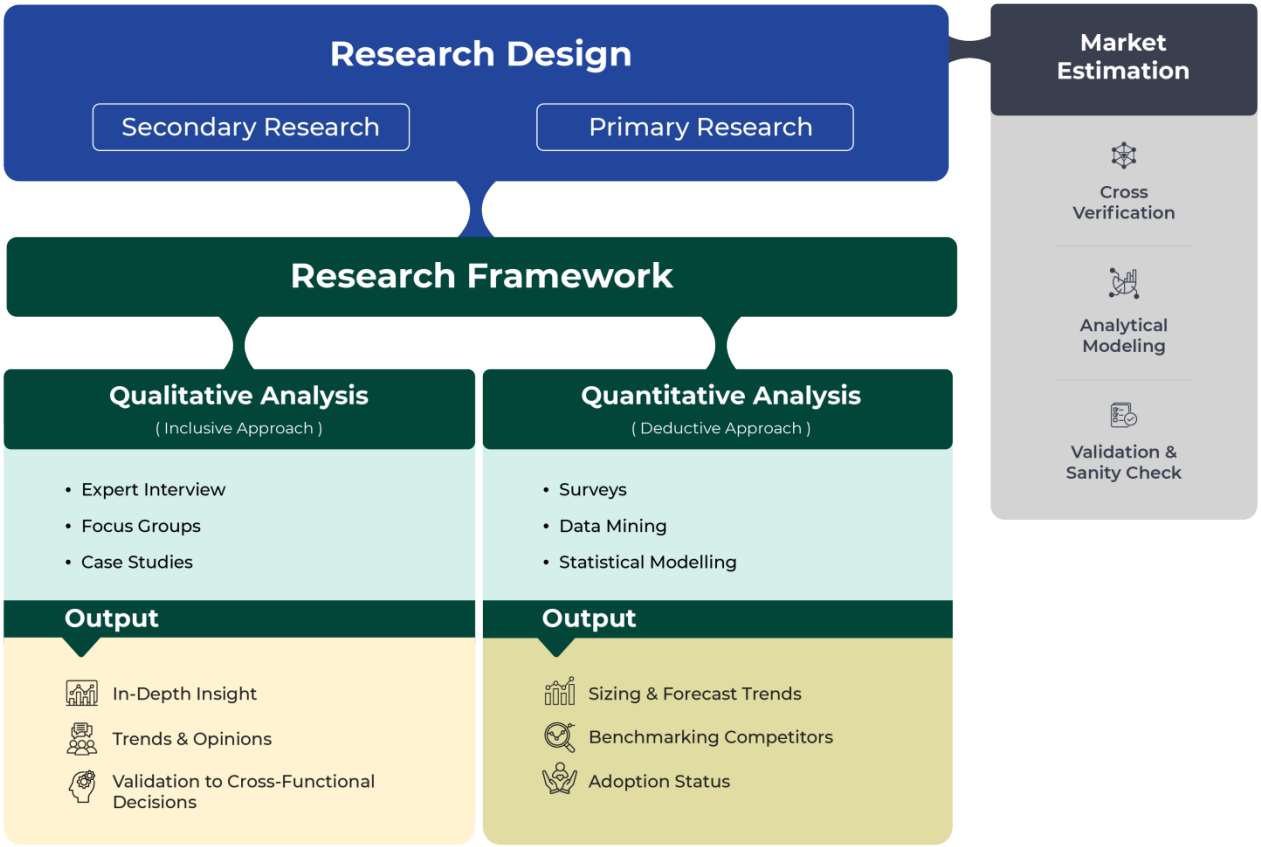
Interpretation must distinguish an announcement from documented commercial availability and a particular authorization from access across all jurisdictions. A source's effective period, coverage, and underlying authority determine the claim it can support. Multiple accounts derived from the same original authority do not provide independent corroboration.

2.3. Research Framework

The framework connects offering eligibility to buyer fit, then to the commercial rights and delivery commitments needed for access. The accepted taxonomy organizes comparable questions, while competitive interpretation concerns evidenced participation, control of the offering, routes to customers, and support responsibilities. Measurement must retain the same equipment boundary rather than allowing a broader financial description to redefine the market.

Strategic options are interpreted against their supporting conditions. Technology breadth can identify useful comparisons, but does not by itself establish buyer preference, competitive advantage, or an attractive entry opportunity.

Figure 3. Global Food Safety Testing Equipment Market, Research Framework



2.3.1. Qualitative Analysis

Qualitative analysis examines how buyer qualification, recognition requirements, equipment compatibility, integration, service continuity, channel commitments, and ownership economics can affect procurement choices. These are commercial mechanisms to examine against evidence, not universal barriers presumed for every equipment category. Relevant alternatives can include retaining an existing equipment arrangement, changing suppliers, or using an independent testing provider; their implications depend on the buyer and application rather than on technology labels alone.

2.3.2. Quantitative Analysis

The Global equipment boundary, specified period roles, USD reporting currency, and absolute monetary scale govern quantitative interpretation. Financial evidence must correspond to the relevant equipment activity, geography, and period before it can describe the study. Equipment Type, Technology Platform, Testing Objective, End User, Deployment Configuration, Sales Channel, and Tested Matrix are cross-cutting views of the same market, not separate opportunities to be added together.

Quantitative conclusions require their own supporting evidence and must distinguish reported observations, attributed activity, estimates, and forecasts. A corporate financial

disclosure cannot be assigned wholesale to Food Safety Testing Equipment merely because the company advertises an included offering.

2.4. Market Size Estimation

Market valuation concerns commercial activity attributable to the included equipment, not total food-safety expenditure or the broader scientific-instrument business. Its analytical role is to translate a consistently bounded equipment universe into monetary interpretation while keeping application attribution, bundled offerings, and channel overlap explicit. Category inclusion or documented supplier capability establishes eligibility for analysis, not a particular financial contribution.

2.4.1. Top-Down Approach

A top-down perspective can provide a scope and plausibility check where a broader public business aggregate has an identifiable relationship to Food Safety Testing Equipment. An aggregate that mixes food and non-food applications, hardware and services, or incompatible periods cannot be treated as the defined equipment market without justified scope reconciliation. Its role is contextual discipline, not a substitute for establishing the included equipment activity.

2.4.2. Bottom-Up Approach

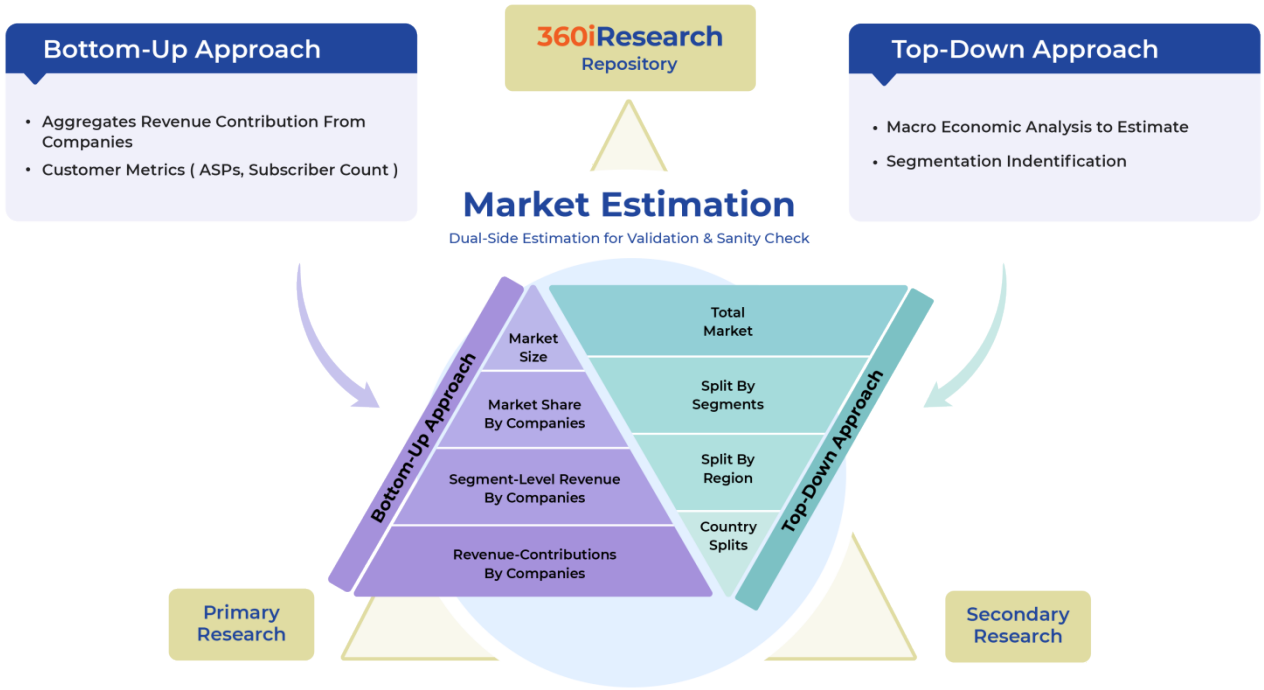
A bottom-up perspective concerns individually evidenced equipment offerings and their documented commercial participation. Its relevance depends on connecting each business fact to the included food-safety equipment activity; a portfolio listing alone does not establish financial attribution. Manufacturer and intermediary records may describe the same offering or transaction, so their overlap requires reconciliation rather than treatment as separate underlying activity.

2.5. Data Triangulation

Reconciliation concerns the substance of a claim before numerical agreement: product identity, application, geography, period, and commercial status must align. A portfolio, an authorization, and a channel agreement can complement one another because they establish different facts, but one cannot replace the others. Shared underlying sources do not constitute independent support, and unresolved differences must retain their effect on the conclusion rather than be averaged away.

The qualitative challenge layer is considered alongside documentary evidence to distinguish plausible economic explanations from established business conditions. It can identify assumptions requiring closer examination without resolving financial attribution or numerical conclusions by itself.

Figure 4. Global Food Safety Testing Equipment Market, Data Triangulation



2.6. Research Outcomes

The intended outcome is decision support that helps equipment suppliers assess which buyers and channels match documented capabilities, helps purchasers distinguish relevant alternatives and qualification obligations, and helps investors evaluate the commercial conditions behind an apparent opportunity. Conclusions should identify the access rights, buyer requirements, integration commitments, and service responsibilities that matter before a commercial commitment, together with credible alternatives and conditions that could change the decision.

2.7. Research Assumptions

- Food-safety attribution: A multipurpose supplier's broader laboratory or industrial portfolio is not assumed to belong wholly to this study. Commercial conclusions must relate to the specific included equipment offering and its food-safety application.
- Application comparability: A shared technology platform or testing objective does not establish that offerings are substitutes. Purchasing comparisons depend on documented relevance to the tested matrix, deployment configuration, and buyer acceptance requirements.
- Local commercial access: Permissions, distribution rights, and service commitments are not assumed to transfer between jurisdictions. Global opportunity assessments must retain the geographic and contractual scope of their supporting facts.
- Commercial continuity: Historical and base-year conditions are not assumed to persist unchanged through the forecast year. Forward-looking interpretations depend on

explicit conditions concerning product availability, regulation, distribution, competition, and buyer priorities.

2.8. Research Limitations

- Mixed business disclosures: When a disclosure combines food and non-food applications, equipment and services, or several product families, its reporting boundary can constrain direct attribution. Apparently similar supplier disclosures may therefore be unsuitable for an equipment-only comparison without scope reconciliation.
- Commercial-status inference: A product announcement, a recognition or authorization, and a buyer's purchase decision establish different facts. One cannot substitute for another when assessing availability, qualification, adoption, or access.
- Bundled offerings: Hardware packages can include associated software, reagents, integration, or service commitments. A package description alone does not justify treating all associated business activity as equipment or treating separately described elements as additive opportunities.
- Demand interpretation: A food-safety requirement does not necessarily lead to a new equipment purchase. A buyer may rely on existing assets or an external laboratory, so evidence of an obligation alone cannot establish demand for additional equipment.

3. Executive Summary

3.1. Introduction

Food Safety Testing Equipment is commercially divided by the safety decision the buyer must support, not by a single interchangeable instrument class. Within the Global market, supporting laboratory equipment, analytical instruments and readers, production-line inspection, and preventive monitoring perform complementary roles. Interscience's preparation and reading offerings, METTLER TOLEDO's inspection systems, and Testo's monitoring portfolio illustrate why equipment function, matrix, objective, and deployment must be matched before shortlisting.

Acceptance is a separate access condition. FDA's Laboratory Accreditation for Analyses of Foods program requires accredited laboratories for specified testing circumstances, with covered import-related obligations subject to applicable scope and compliance dates; it does not cover all food testing. The food owner needing accepted results may therefore differ from the laboratory authorizing equipment. Suppliers should qualify that acquisition authority and the accepted deliverable rather than translate an assurance obligation directly into a hardware order.

Sources & Evidence

1. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
   · LAAF requires owners and consignees to use accredited laboratories in specified circumstances, not for all food testing. Covered import-related implementation depends on applicable analyte groups and compliance dates. Separating the evidence customer from the equipment purchaser is a bounded commercial inference. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/laboratory-accreditation-analyses-foods-laaf-program-final-rule))
2. Products and Accessories - Microbiology
   · Interscience separately lists preparation equipment, colony counters, and combined incubation-and-counting equipment, illustrating distinct purchasing functions rather than universal interchangeability. ([interscience.com](https://www.interscience.com/en/products/))
3. Digital Food Safety Management with testo Saveris Food
   · Testo markets stationary monitoring and handheld measurement for food-business settings, a purchasing role distinct from laboratory analysis or production-line inspection. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
4. Mix and Match Your Ideal Combination Inspection System
   · METTLER TOLEDO markets standalone and combined inspection systems, including metal detection and X-ray inspection, establishing an inspection-specific commercial role. ([mt.com](https://www.mt.com/us/en/home/library/product-brochures/product-inspection/PI/Combinations_Brochure.html))

3.2. CXO Perspective

Laboratory executives should compare selective functional renewal with combined equipment before approving a complete replacement. Interscience markets separate functions and combined incubation-reading equipment; retaining assets remains conditional on application fit and continuing support. Incumbents can compete on application continuity and contracted support, as bioMérieux's GENE-UP offering illustrates. Entrants need a matched deliverable

and accountable handover, not merely a similar technology label. Selective investment preserves assets but retains cross-supplier coordination; combined purchasing becomes preferable when consolidation matters and complete accountability can be contracted.

Manufacturers and channel entrants face a different commitment question in international expansion: whether local selling and support authority can be secured. DKSH's January xx.xx 2025 Malaysian Hygiena announcement assigns commercialization and after-sales roles, while its LabShop terms require separate business-to-business arrangements. Buyers should identify the seller, warranty authority, and escalation owner; suppliers should verify continuing appointment and territory before customer commitments. A local channel can simplify handover but adds a contractual interface. Direct selling is an alternative only when destination-specific obligations can be undertaken.

Sources & Evidence

1. Products and Accessories - Microbiology
   · The separate and combined equipment categories support comparison of selective renewal with functional consolidation; retained-equipment suitability is not established by the catalog. ([interscience.com](https://www.interscience.com/en/products/))
2. GENE-UP - bioMérieux
   · bioMérieux associates GENE-UP with food-related applications and advertises installation, IT integration, training, maintenance, repairs, and remote support. This supports application-and-service positioning, not universal acceptance or guaranteed local fulfillment. ([biomerieux.com](https://www.biomerieux.com/corp/en/our-offer/industry-products/gene-up-automated-pathogen-detection.html))
3. DKSH and Hygiena® Expand Partnership to Deliver Food Safety and Health Diagnostics Solutions in Malaysia
   · The January xx.xx 2025 Malaysian announcement assigns DKSH marketing, sales, distribution, and after-sales functions for Hygiena offerings, including ATP cleaning-verification systems. It documents a channel role, not separate manufacture or indefinite appointment rights. ([dksh.com](https://www.dksh.com/my-en/home/media/news/dksh-and-hygiena-expand-partnership-to-deliver-food-safety-and-health-diagnostics-solutions-in-malaysia))
4. Terms and Conditions | DKSH Malaysia LabShop
   · LabShop identifies DKSH Technology Sdn Bhd as operator, retains product fulfillment and customer-support obligations with DKSH, and states that business-to-business transactions are subject to separate arrangements. Customer-specific obligations therefore require agreement-level confirmation. ([labshop.dksh.com.my](https://labshop.dksh.com.my/shop/terms-and-conditions))

3.3. New Revenue Opportunities

The assessed revenue routes are selective functional renewal in installed laboratories; complete accepted grain-reader packages; coordinated monitoring for Food Retailers and Foodservice Operators with a defined oversight gap; and accountable production-line inspection for Food and Beverage Manufacturers and Packers. DKSH's Malaysian EnSURE Touch listing adds a country-specific procurement lead, while institutional opportunities depend on authorized funding and procurement milestones. These routes remain conditional on an accepted application and executable support package; suitable existing assets or narrower purchases can be preferable. The Opportunity Mapping section provides the detailed assessment.

Sources & Evidence

1. Products and Accessories - Microbiology
   · Separately advertised preparation and reading functions provide the commercial premise for the previously assessed selective-renewal opportunity. ([interscience.com](https://www.interscience.com/en/products/))
2. Digital Food Safety Management with testo Saveris Food
   · The UK Saveris Food offering addresses coordinated monitoring and documentation in restaurants, catering, and distribution centers, supporting the assessed oversight-related opportunity. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
3. FGIS Performance Verified Aflatoxin Test Kits
   · FGIS lists RIDA QUICK Aflatoxin RQS with RIDA SMART BOX and RIDA SMART APP for corn alongside other reader-associated packages. Acceptance attaches to the complete listed application rather than unrestricted reader use. ([ams.usda.gov](https://www.ams.usda.gov/sites/default/files/media/FGISApprovedMycotoxinRapidTestKits.pdf))
4. Mix and Match Your Ideal Combination Inspection System
   · Standalone and combination systems are advertised with service, training, and connectivity support. These offerings support the assessed inspection-package opportunity without establishing buyer-specific integration accountability. ([mt.com](https://www.mt.com/us/en/home/library/product-brochures/product-inspection/PI/Combinations_Brochure.html))
5. Hygiena EnSURE Touch Instrument ETOUCH | DKSH Malaysia LabShop
   · DKSH Malaysia LabShop advertises the Hygiena EnSURE Touch instrument and provides a quotation route. The listing establishes a country-specific procurement lead, not completed delivery or continuing appointment rights. ([labshop.dksh.com.my](https://labshop.dksh.com.my/shop/p/hygiena-ensure-touch-instrument-etouch-tecpim000531181))
6. ID 6121155 - AFBI - CSB - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer with Linear Ion Trap Functionality
   · AFBI's March xx.xx 2026 notice describes an equipment package including installation, training, warranty, and maintenance. An additional acquisition remains subject to funding, budgetary approval, and buyer-supplier agreement; the notice does not establish exercise of that option. ([sell2wales.gov.wales](https://www.sell2wales.gov.wales/search/show/search_view.aspx?ID=MAR598215&catID=))

3.4. Next-Generation Business Models

Equipment monetization can extend into a continuing records-and-service relationship without making every purchase a platform replacement. Testo's UK Saveris Food offering combines hardware, software, and services, while separately marketed thermometers preserve a narrower alternative. Central food-safety teams should choose the bundle only for an explicit oversight need, with record access, review ownership, and local support agreed; central visibility comes with continuing platform obligations.

Ownership and maintenance are also separable choices. METTLER TOLEDO markets external and mobile inspection plus rentals for bounded requirements; Agilent offers support for non-Agilent chromatography and mass spectrometry instruments. These are documented commercial options, not evidence of universal adoption. Buyers should compare them with ownership or separate manufacturer agreements only after matching acceptance, scheduling, and instrument-location coverage. Continuous onsite control or excluded application support can make the alternatives unsuitable.

Subscription flexibility remains a distinct unresolved risk. SureTrend's product description and service terms do not settle an individual buyer's cancellation rights. Optional expansion or renewal should await written clarification of the governing agreement, exit mechanics, and continuing record access.

Sources & Evidence

1. Digital Food Safety Management with testo Saveris Food
   · Saveris Food combines hardware, software, and services. The associated governance and support prerequisites are conditional commercial implications, not demonstrated customer outcomes. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
2. Multi-Vendor Services - Agilent
   · Agilent markets repair, maintenance, and compliance support for non-Agilent chromatography and mass spectrometry instruments, providing a maintenance-provider alternative without establishing universal coverage. ([agilent.com](https://www.agilent.com/en/s/maintenance-repair/service-plans/multi-vendor))
3. X-ray Inspection Services with X-ray Reclaim
   · METTLER TOLEDO advertises off-site inspection, mobile inspection, and X-ray equipment rentals, including arrangements for temporary requirements and maintenance periods. These establish commercial alternatives to permanent ownership, subject to a matched customer agreement. ([mt.com](https://www.mt.com/us/en/home/products/Product-Inspection_1/x-ray-inspection-services.html?cmp=als_xray-reclaim))
4. SureTrend Terms of Service
   · SureTrend's published service terms prescribe automatic renewal unless the customer requests nonrenewal in writing xx.xx days before the next subscription period. The governing purchase agreement must be identified before treating exit flexibility as settled. ([hygiena.com](https://www.hygiena.com/terms-and-conditions-suretrend))
5. SureTrend Food Safety Management Software
   · SureTrend's product page describes cancellation to prevent future billing and no long-term commitments. These statements require reconciliation with the separate service terms for the buyer's particular plan; they do not establish post-exit record entitlements. ([hygiena.com](https://www.hygiena.com/software/suretrend))
6. Food Thermometers - Testo
   · Testo separately markets food thermometers, including testo xx.xx-IR, for professional kitchens, restaurants, and supermarkets. This establishes a narrower purchasing alternative to its broader records-and-service bundle. ([testo.com](https://www.testo.com/en-UK/products/food-thermometers))

3.5. Industry Roadmap

During 2026-2027, public milestones should trigger commercial qualification, not assumed replacement. April xx.xx 2027 is the pre-harvest agricultural-water compliance date for covered very small farms producing non-sprout produce under FDA's systems-based framework; it is not a hardware mandate. FGIS lists August xx.xx 2027 as the certificate expiration for R-Biopharm AG's RIDA QUICK Aflatoxin RQS pairing with RIDA SMART BOX and RIDA SMART APP for corn. Affected buyers should verify continuing acceptance before commitment; expiration does not establish failed renewal.

During 2028-2029, service renewal offers a decision point separate from equipment replacement. Mixed-brand laboratories can compare Agilent's multi-vendor proposition with manufacturer agreements, retaining the latter where necessary application or local support would be lost. The trigger is matched contractual coverage, not an assumed fleet-refresh cycle.

During 2030-2032, renewal should follow application and support continuity. Laboratories should compare retained assets, eligible certified pre-owned instruments, and supported new equipment. Agilent's pre-owned program documents that option, while covered EU equipment also requires allocation of national Waste Electrical and Electronic Equipment responsibilities. Future eligibility, support, and legal applicability must be reconfirmed; neither asset age nor refurbishment alone establishes the better choice.

Sources & Evidence

1. FSMA Final Rule on Pre-Harvest Agricultural Water

   · FDA's revised non-sprout pre-harvest agricultural-water framework uses systems-based assessments. The listed compliance date for covered very small farms is April xx.xx 2027; that milestone does not independently establish an equipment purchase. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-pre-harvest-agricultural-water))

2. WEEE Responsibilities

   · For covered electrical and electronic equipment, Your Europe describes registration in each EU country of sale and waste-management responsibilities. The long-term renewal scenario retains equipment classification and applicable national arrangements as conditions. ([europa.eu](https://europa.eu/youreurope/business/product-rules-compliance/recycling-waste-management/weee-responsibilities/index_en.htm))

3. Multi-Vendor Services - Agilent

   · Agilent distinguishes service plans by instrument and region. Comparing matched coverage at renewal during 2028-2029 is a conditional purchasing scenario, not a forecast of adoption or future plan availability. ([agilent.com](https://www.agilent.com/en/s/maintenance-repair/service-plans/multi-vendor))

4. FGIS Performance Verified Aflatoxin Test Kits

   · The specified R-Biopharm corn-aflatoxin pairing has a listed certificate expiration of August xx.xx 2027. The expiration is an acceptance-review milestone, not evidence of failed renewal. ([ams.usda.gov](https://www.ams.usda.gov/sites/default/files/media/FGISApprovedMycotoxinRapidTestKits.pdf))

5. Agilent Certified Pre-Owned Instruments - Frequently Asked Questions

   · Agilent documents a certified pre-owned analytical-instrument purchasing program with warranty and support options. Service-contract eligibility depends on the instrument's support life; the document does not guarantee future eligibility or food-safety application suitability. ([agilent.com](https://www.agilent.com/content/dam/about/newsroom/media-room/circular-economy/CPO%xx.xx-%20FAQ%20Final%20Document.pdf))

4. Market Overview

4.1. Introduction

Food Safety Testing Equipment comprises complementary purchasing markets rather than a single interchangeable instrument class. ■■■ ■■■■■■ ■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■ ■■■■■■■■■■■ ■ ■■■■■■■■ ■■■■■■■■■■ ■■■■ ■■■■■■■■■■ ■ ■■■■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■ ■ ■■■■ ■■■■■■■■ ■■■■■■■ ■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■■■■■■■■ ■■■■■■■■■■■ ■ ■■■■■■■■■■ ■■■■■■■■■■ Portable, stationary standalone, and production-line-integrated configurations address different decisions across food products and ingredients, water, food-contact materials, and food-chain environments.

■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■ ■■■■■■■■■■ INTERSCIENCE lists sample-preparation equipment, incubators, and counters; Thermo Fisher Scientific describes analytical instruments and food inspection equipment; METTLER TOLEDO offers standalone and integrated inspection systems; and Testo describes handheld and stationary food-safety monitoring equipment. These are examples of distinct commercial roles, not evidence that every platform serves every matrix or that an offering is available under identical terms worldwide.

The purchasing question is therefore which equipment function supports an accepted safety decision, where it must operate, and who will maintain it. ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■ Associated software, consumables, integration, and services influence those conditions without becoming independent equipment categories.

Figure 5. Global Food Safety Testing Equipment Market Size, 2017-2040 (USD Million, Growth %)

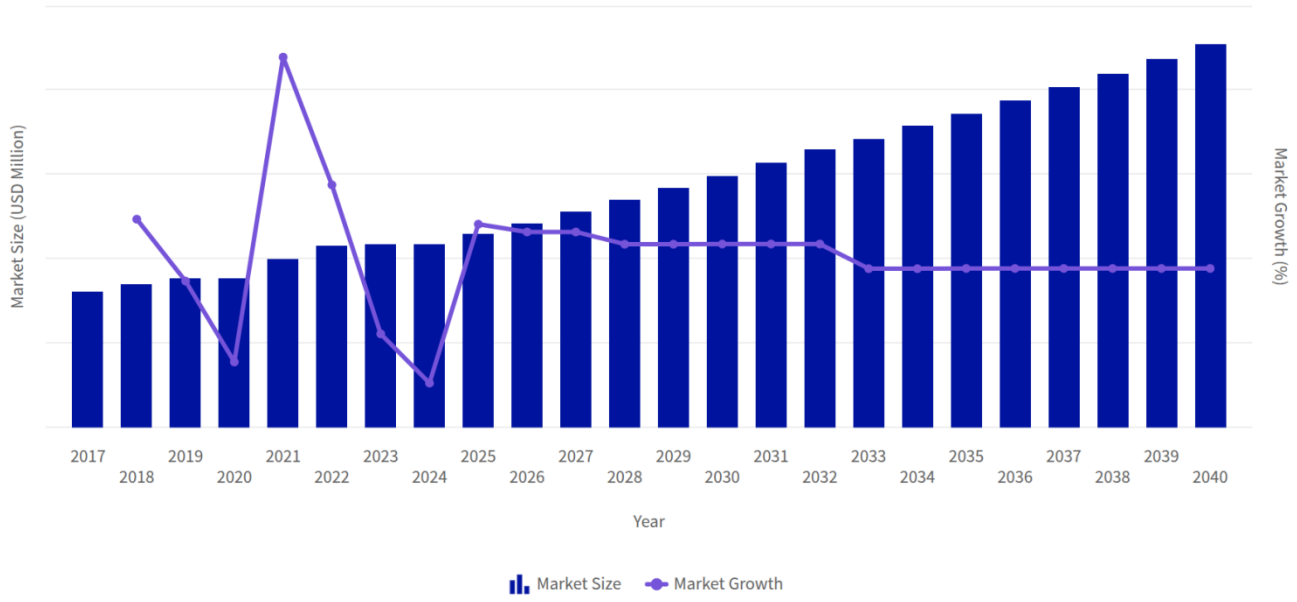


Table 2. Global Food Safety Testing Equipment Market Size, 2017-2040 (USD Million, Growth %)

Metric	2017	2024	2025	2026	2027	2032	2040
Market Size (USD Million)	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Market Growth (%)	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Sources & Evidence

1. Food and Beverage - Thermo Fisher Scientific
   - Thermo Fisher Scientific's food and beverage portfolio describes analytical instruments and food inspection equipment, supporting distinct equipment roles. ([thermofisher.com](https://www.thermofisher.com/us/en/home/industrial/food-beverage.html))
2. Products and Accessories - Microbiology
   - INTERSCIENCE lists laboratory blenders, sample-preparation equipment, incubators, and counters and identifies food among its served sectors. ([interscience.com](https://www.interscience.com/en/products/))
3. Product Inspection Systems - METTLER TOLEDO
   - METTLER TOLEDO describes standalone and integrated product inspection equipment, including metal detection, X-ray, and vision offerings. ([mt.com](https://www.mt.com/us/en/home/products/Product-Inspection_1.html))
4. Digital Food Safety Management with testo Saveris Food
   - Testo describes stationary monitoring, handheld meters, software, and services for food-safety management, with restaurant, catering, and distribution-center applications. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
5. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
6. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
7. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.

8. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
9. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
10. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
11. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.

12. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
13. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
14. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
15. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
16. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
17. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
18. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

19. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
20. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
21. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

4.2. Key Growth Contribution

Documented verification and customer-assurance obligations can support equipment adoption when existing capability cannot deliver the accepted evidence. FDA requires application-dependent monitoring and verification records, while Walmart requires applicable assurance activities and access to results. Serving this need requires equipment matched to the safety objective, usable records, and continuing support; connected hygiene instruments illustrate an offered records capability without making advanced analysis compulsory. The material counterforce is fulfillment choice: suitable installed assets or an accepted external relationship can satisfy the evidence need without another purchase. Suppliers should qualify that gap and the acquisition authority before treating assurance obligations as demand.

Figure 6. Global Food Safety Testing Equipment Market, Key Growth Contribution, by Region, 2025-2032 (USD Million)

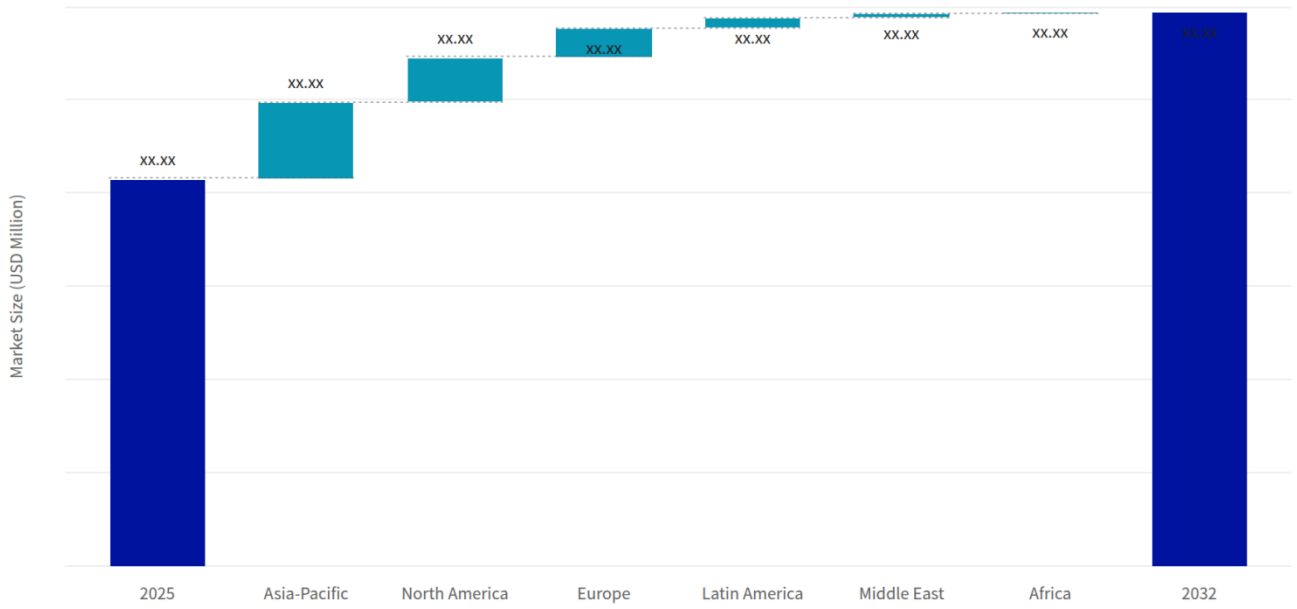


Figure 7. Global Food Safety Testing Equipment Market, Key Growth Contribution, by Country, 2025-2032 (CAGR %)

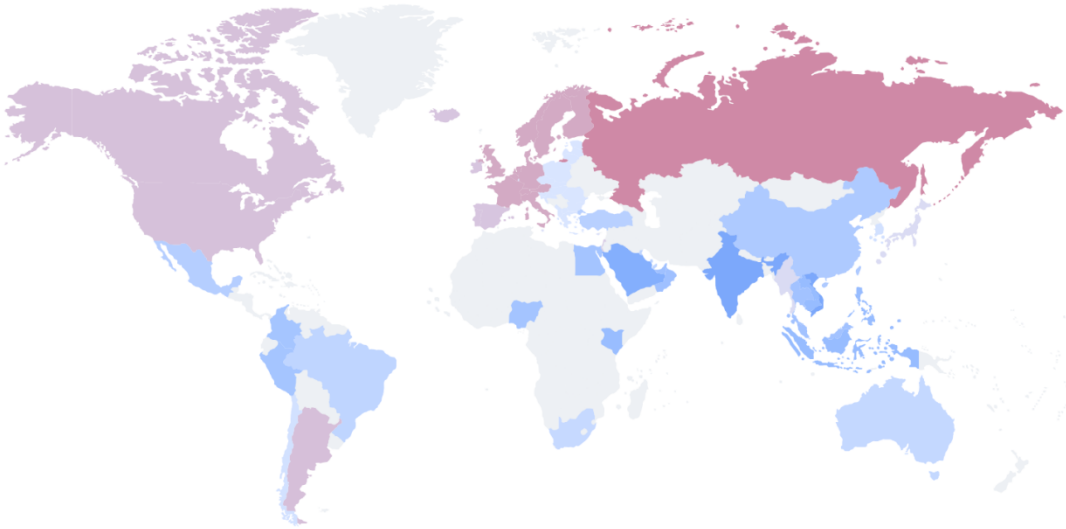


Table 3. Global Food Safety Testing Equipment Market, Key Growth Contribution, 2025-2032

Scope	Leading Category	Added Market Size (USD Million)	Growth Share (%)	CAGR (%)
Country	xx.xx	xx.xx	xx.xx	xx.xx
Deployment Configuration	xx.xx	xx.xx	xx.xx	xx.xx
End User	xx.xx	xx.xx	xx.xx	xx.xx
Equipment Type	xx.xx	xx.xx	xx.xx	xx.xx
Region	xx.xx	xx.xx	xx.xx	xx.xx
Sales Channel	xx.xx	xx.xx	xx.xx	xx.xx
Technology Platform	xx.xx	xx.xx	xx.xx	xx.xx
Tested Matrix	xx.xx	xx.xx	xx.xx	xx.xx
Testing Objective	xx.xx	xx.xx	xx.xx	xx.xx

Sources & Evidence

1. FSMA Final Rule for Preventive Controls for Human Food

   · FDA requires documented monitoring and verification, with product testing and environmental monitoring applicable according to the facility, food, and preventive control. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-preventive-controls-human-food))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.

2. EnSURE Touch ATP Luminometer for Hygiene Monitoring

   · EnSURE Touch is marketed with SureTrend connectivity and remote support; advanced data analysis is described as optional. ([hygiena.com](https://www.hygiena.com/hygiene-monitoring/atp-cleaning-verification/ensure-touch/hygiena-ensure-touch))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.

3. Audits, Certifications and Testing - Walmart
   - Walmart requires applicable audits, inspections, tests, results, and access to supplier records; its policy does not prescribe equipment ownership. ([corporate.walmart.com](https://corporate.walmart.com/suppliers/requirements/audits-and-certifications))
4. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.

5. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from lower-cost readers; it is not a chemical-objective revenue disclosure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Public hardware-cost tiers distinguish lower-cost readers from capital-intensive analytical systems; supports asset-weighted captive-laboratory allocation rather than unadjusted counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Public hardware-cost tiers distinguish lower-cost readers from capital-intensive analytical systems; supports

6. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only

7. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

14. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The differing Instrumentation and Solutions results support retaining a heterogeneous monitoring cohort model rather

15. Anritsu Integrated Report 2025

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

16. Eurofins Scientific - FY 2025 Results Presentation

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.

17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
19. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
20. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
21. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
22. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.

23. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
24. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
25. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
26. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
27. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
28. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.

29. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
30. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
31. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
32. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

33. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
34. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))
35. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

36. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

37. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
38. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

39. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
40. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
41. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
42. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
43. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
44. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.

45. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
46. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.
47. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
48. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
49. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
50. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

51. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
52. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
53. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
54. FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

55. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
56. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
57. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
58. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
59. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

60. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
61. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
62. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
63. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
64. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

65. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

66. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

67. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

68. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

69. Mettler-Toledo Standard Terms and Conditions for Sales and Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
70. Food and Beverage Resource Guide for Commercial Food Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
71. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
72. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
73. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

4.3. Industry Ecosystem & Value Chain Analysis

Value is created by supplying equipment that supports a usable safety decision, but equipment delivery alone does not control acceptance of that decision. FDA's LAAF program links covered US import-related analyses to laboratory accreditation, applicable analyte groups, and compliance dates. ▬▬▬▬▬▬▬▬▬▬ ▬▬▬▬▬▬▬▬▬▬ ▬▬▬▬▬▬▬▬▬▬ ▬▬▬▬▬▬▬▬▬ ▬▬▬▬▬▬▬▬▬

[redacted] Contracted handover and support form another control point. [redacted] It nevertheless demonstrates why a hardware-only quotation may not satisfy a laboratory acquisition: responsibility extends beyond shipment to the buyer's specified handover and support obligations.

Data relationships can extend this dependency after installation. [redacted] It should be evaluated as a contractual dependency and supporting value-chain relationship, not automatically counted as additional equipment activity.

Sources & Evidence

1. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
   · FDA links covered import-related testing to LAAF laboratory scope, analyte-specific capacity determinations, and applicable compliance dates; the program does not cover all food testing. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/laboratory-accreditation-analyses-foods-laaf-program-final-rule))
2. Laboratory Recognition Programme
   · Singapore's programme requires local facilities, accreditation, and regulatory assessment. Recognized laboratories can serve export-certificate testing needs and participate in SFA outsourcing tenders. These are laboratory-access relationships, not equipment approvals. ([sfa.gov.sg](https://www.sfa.gov.sg/recognition-programmes-grants/recognition-programmes/laboratory-recognition-programme))
3. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
   · AFBI's December xx.xx 2025 tender requested LC-MS supply, installation, commissioning, training, additional warranty, and preventive maintenance. It establishes requested obligations, not award or completion. ([find-tender.service.gov.uk](https://www.find-tender.service.gov.uk/Notice/xx.xx-2025/PDF))
4. ProdX - The Next Level in Product Safety
   · METTLER TOLEDO describes ProdX inspection-record management, remote access, and enterprise-system integration. ([mt.com](https://www.mt.com/us/en/home/products/Product-Inspection_1/prodx-quality-management-software.html))

4.3.1. Supply-Side Analysis

[redacted] A broad catalog is not proof of equivalent capability across all accepted Technology Platform, Tested Matrix, or Testing Objective categories. Buyers should compare the specific offered equipment and its food-safety application rather than the supplier's total laboratory or industrial portfolio.

For platform-centered purchases, associated application coverage and support can influence continuity. ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■ ■■■■ ■■■■■■■■■ ■■■■ ■■■■ ■■■ ■■■■■■■■■■■■■■■■■■ ■■■■■■■■■ This creates a reason to examine the supported application, compatible associated products, and service commitments together, without assuming that every associated purchase belongs to the equipment boundary.

After-sales dependence is not necessarily exclusive to the original manufacturer. ■■■■■■■ ■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■■ ■■■ ■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■ ■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■■ ■■■■■■■■ A supplier's general service portfolio does not replace a product-specific undertaking.

Sources & Evidence

1. Food and Beverage - Thermo Fisher Scientific
   · The company's described analytical and inspection offerings support a function-specific supply comparison, not attribution of its entire business.
2. Products and Accessories - Microbiology
   · The catalog establishes supporting microbiology equipment roles, not capability across every accepted platform.
3. Product Inspection Systems - METTLER TOLEDO
   · The portfolio supports inspection-specific supply roles and integration relationships.
4. GENE-UP - bioMérieux
   · bioMérieux presents GENE-UP with validated test kits and instrument-support services. This establishes an associated offering, not automatic acceptance for every application. ([biomerieux.com](https://www.biomerieux.com/corp/en/our-offer/industry-products/gene-up-automated-pathogen-detection.html))
5. Multi-Vendor Services - Agilent
   · Agilent markets repair, maintenance, and compliance support for non-Agilent chromatography and mass spectrometry instruments. Actual instrument and regional coverage require confirmation. ([agilent.com](https://www.agilent.com/en/s/maintenance-repair/service-plans/multi-vendor))

4.3.2. Demand-Side Analysis

Demand differs according to the decision the buyer must support. Food and Beverage Manufacturers and Packers may need evidence for their own control systems and customer commitments, while Food-Contact Material Manufacturers face a separate documentation chain. ■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■ ■■■■ ■■ ■■■■■■■■■■ ■■■■■■ ■■■■■■■■■■■■■ ■■■■ ■■■■■ ■■■■■■■■■■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■ ■■■■■■■■ ■■■■ ■■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■■■■■ ■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■

Downstream buyers have a different equipment proposition. ■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■■■■■■ ■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■ ■■■■■■■■ ■■■■■■ ■■■■ ■ ■■■■■■■■■■ ■■■■■■■■■■■■ Central procurement should distinguish site-level equipment needs from organization-wide data and support commitments.

[redacted] Government Food-Control Organizations have additional surveillance requirements, illustrated by CDC's use of sequencing in PulseNet. These distinctions mean that the organization requiring evidence, the organization operating equipment, and the organization financing an acquisition need not be the same.

Sources & Evidence

1. Ramping Up Singapore's Food Testing Capabilities
   · SFA's January xx.xx 2023 account describes progressive outsourcing of food-testing services to recognized private laboratories, supporting an observed alternative to internal equipment ownership. ([sfa.gov.sg](https://www.sfa.gov.sg/food-for-thought/article/detail/ramping-up-singapore%27s-food-testing-capabilities))
2. Legislation - Food Contact Materials
   · The Commission explains that plastic food-contact material declarations of compliance rely on supporting safety documentation that must be available to enforcement authorities. ([food.ec.europa.eu](https://food.ec.europa.eu/food-safety/chemical-safety/food-contact-materials/legislation_en))
3. PulseNet Timeline
   · CDC documents PulseNet's transition to whole-genome sequencing for surveillance and outbreak detection, establishing a public-health institutional use case distinct from routine manufacturer checks. ([cdc.gov](https://www.cdc.gov/pulsenet/php/anniversary/timeline.html))
4. Digital Food Safety Management with testo Saveris Food
   · The offering supports a downstream monitoring purchasing context distinct from laboratory analysis.

4.3.3. Stakeholder Analysis

Regulators and accreditation bodies control different access conditions from those controlled by equipment suppliers. [redacted] Instrument ownership must not be represented as equivalent to regulatory recognition.

[redacted] The food supplier must establish which evidence satisfies that customer relationship; the equipment vendor cannot confer customer approval merely by describing audit-support functionality. Procurement should identify who accepts the evidence separately from who signs the equipment and service contract.

Academic and Research Institutions also participate through funded infrastructure and skills development. [redacted] For such projects, the relevant commitment trigger is a funded, specified acquisition rather than a manufacturer's production requirement.

Sources & Evidence

1. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
   · FDA recognizes accreditation bodies, which accredit participating laboratories. Owners and consignees face obligations in specified circumstances, distinct from purchasing equipment.
2. Devolution Grants to Build Skills Training Infrastructure in Agrifood
   · Lincolnshire County Council's May xx.xx 2025 announcement included proposed food-science laboratory resources and chemical-analysis equipment for DN Colleges Group. It establishes announced funding and intended infrastructure, not completed procurement. ([lincolnshire.gov.uk](https://www.lincolnshire.gov.uk/news/article/xx.xx/devolution-grants-to-build-skills-training-infrastructure-in-agrifood))
3. Audits, Certifications and Testing - Walmart
   · Walmart requires applicable audits, inspections, tests, access to products, facilities, and records, and provision of results. ([corporate.walmart.com](https://corporate.walmart.com/suppliers/requirements/audits-and-certifications))

4.4. Market Dynamics

[redacted] The same obligation can support an internal equipment purchase, use of an existing asset, or expenditure with an external laboratory. Equipment demand should therefore be interpreted through the buyer's chosen fulfillment model rather than inferred directly from the existence of regulation.

Regulatory change is not uniformly expansionary for equipment purchasing. FDA's agricultural-water rule replaced certain prescriptive pre-harvest testing provisions with systems-based assessments, while retaining testing in relevant circumstances. [redacted]

Sources & Evidence

1. FSMA Final Rule on Pre-Harvest Agricultural Water
   · FDA's revised rule replaces certain previous pre-harvest agricultural-water criteria and testing requirements with systems-based assessments for covered produce other than sprouts. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-pre-harvest-agricultural-water))
2. ProdX - The Next Level in Product Safety
   · The associated offering supports a commercial interpretation involving continuity and integration rather than equipment ownership alone.

4.4.1. Key Drivers

4.4.1.1. Documented verification requirements create application-specific purchasing triggers

FDA's preventive-controls framework requires documented verification and identifies product testing, environmental monitoring, and instrument accuracy checks as applicable activities.

[redacted] Suppliers must connect the equipment's role to the buyer's applicable plan rather than present regulation as universal purchase demand.

Sources & Evidence

1. FSMA Final Rule for Preventive Controls for Human Food
   · FDA identifies documented verification, instrument accuracy checks, product testing, and environmental monitoring as relevant activities, with applicability depending on the food, facility, and preventive control. The equipment-purchasing implication is conditional rather than a mandated acquisition. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-preventive-controls-human-food))

4.4.1.2. Customer assurance requirements connect safety documentation to supply-chain access

Walmart requires suppliers to obtain applicable audits, inspections, and tests and make products, facilities, and records available. Such customer conditions can make demonstrable assurance a requirement for retaining a food-supply relationship. [redacted]

Sources & Evidence

1. Audits, Certifications and Testing - Walmart
   · The buyer policy supports a customer-assurance purchasing rationale without specifying a hardware brand or universal ownership requirement.

4.4.1.3. Connected instruments extend the purchasing case to records management

Hygiena's EnSURE Touch combines a handheld hygiene-monitoring instrument with SureTrend connectivity and remote support functions. The purchasing rationale extends beyond a local reading to consistent management of records across facilities. [redacted]

Sources & Evidence

1. EnSURE Touch ATP Luminometer for Hygiene Monitoring
   · Hygiena describes EnSURE Touch as a handheld hygiene-monitoring instrument with SureTrend connectivity, centralized reporting, and remote training and support functions. The adoption rationale is an inference, not demonstrated universal uptake. ([hygiena.com](https://www.hygiena.com/hygiene-monitoring/atp-cleaning-verification/ensure-touch/hygiena-ensure-touch))

4.4.1.4. Public surveillance sustains specialist laboratory purchasing requirements

Public surveillance supports equipment roles beyond manufacturers' routine checks. CDC documents PulseNet's transition to whole-genome sequencing for foodborne surveillance, while the Food Standards Agency's 2026/xx.xx plan includes laboratory support, surveillance, and statutory radioactivity monitoring. ■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■■■■■■■■■■■■■ ■■■ ■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■ ■■■■■■ ■■ ■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■ ■ ■■■■■■■■■■■■ ■■■■■■■■■■ ■■ ■■■ ■■■■■■■ ■■ ■■■■■■■■■■ ■■■■■■■

Sources & Evidence

1. FSA 2026/27 Annual Plan and Budget
   - The FSA's 2026/xx.xx plan includes a national food-surveillance programme with laboratory support and statutory radioactivity monitoring. These establish planned institutional activities, not a particular equipment award. ([gov.uk](https://www.gov.uk/government/publications/fsa-bc-xx.xx-fsa-xx.xx-annual-plan-and-budget/fsa-xx.xx-annual-plan-and-budget))
2. PulseNet Timeline
   - The timeline supports sequencing's surveillance role, not a new equipment procurement.

4.4.2. Key Restraints

4.4.2.1. Risk-based obligations do not establish mandatory equipment ownership

FDA's revised pre-harvest agricultural-water framework for covered produce other than sprouts uses systems-based assessments instead of the previous set of microbial quality criteria and testing requirements. Testing can remain relevant, but a compliance deadline alone does not establish a new equipment requirement for a Primary Food Producer. ■■■■■■■■■■ ■■■■ ■■■■■■■ ■■ ■■■ ■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■ ■■■■■■■■■ ■■■■■ ■■■■■■■■■■ ■■■■ ■■■■■■■■■ ■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■ ■■ ■■■■■■■■■■ ■■■■■■■

Sources & Evidence

1. FSMA Final Rule on Pre-Harvest Agricultural Water
   - Testing remains relevant in applicable circumstances; the rule does not independently establish a farm's equipment acquisition.

4.4.2.2. External and temporary fulfillment can displace permanent acquisitions

Recognized external laboratories and temporary inspection arrangements compete with equipment ownership for suitable requirements. ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■ ■■ ■■■■■■■ ■■■■■■■■■■■■■ ■■■■■ ■■■■■■■ ■■■■■■■■ ■■■■■ ■■■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■ ■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■ ■ ■■■■■■■■■ ■■■■■■■■■■■ ■■■ ■ ■■■■■■■ ■■■■■■■■■■■■ Their suitability depends on local availability, customer acceptance, scheduling, and the buyer's need for continuous onsite capability; they are not universal substitutes for installed equipment.

Sources & Evidence

1. Ramping Up Singapore's Food Testing Capabilities
   · Recognized laboratories support food businesses and traders through external testing services; suitability as a substitute remains application-specific.
2. X-ray Inspection Services with X-ray Reclaim
   · METTLER TOLEDO describes X-ray Reclaim external inspection, mobile services, and equipment rentals. These are stated alternatives for bounded requirements, subject to local contractual availability. ([mt.com](https://www.mt.com/us/en/home/products/Product-Inspection_1/x-ray-inspection-services.html?cmp=als_xray-reclaim))

4.4.2.3. Recognition and accreditation constrain the commercially usable choice set

Acceptance is specific to the laboratory's recognized role and scope. EU official-control laboratory designation normally requires accreditation, subject to stated derogations. ■■■■■ ■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■ ■■■■■ ■■■■■■ ■■■■■ ■■■■■ ■■■■■■■■■■■■■■ ■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■■■ ■■■■■■■■■■ ■■ ■■■■■■■■■■ ■■ ■■■■■■■■■ ■ ■■■■■■■■■■ ■■■■■■ ■■■■■■■■■■■ ■■■■ ■■■ ■■■■■■■■■■■■■■ ■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■ ■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■ ■■■■■■■■■■■ ■■■■■ ■■■ ■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■■■■ ■■■ ■■■■ ■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■■■

Sources & Evidence

1. Legislation on Official Controls
   · The European Commission describes accreditation to EN ISO/IEC xx.xx as a condition for official-control laboratory designation and identifies permanent and temporary derogations. This supports a scoped recognition constraint, not a universal instrument-approval requirement. ([food.ec.europa.eu](https://food.ec.europa.eu/horizontal-topics/official-controls-and-enforcement/legislation-official-controls_en))
2. Compliance Order for All Laboratories - FSSAI, I/35118/2026
   · FSSAI's 2026 order directs notified laboratories to follow prescribed methods within NABL accreditation scope and prescribed report formats. ([fssai.gov.in](https://www.fssai.gov.in/upload/advisories/2026/xx.xx/699855f2b69d3Compliance%20Order%20for%20All%20Laboratories.pdf))

4.4.3. Key Opportunities

4.4.3.1. Selective renewal of a documented laboratory equipment gap

Laboratories with an identified supporting-equipment gap can consider selective renewal rather than complete platform replacement. ■■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ The opportunity depends on retained assets remaining suitable and responsibility across suppliers being explicit; consolidation remains preferable when combining functions and accountability is the actual purchasing objective.

Sources & Evidence

1. Products and Accessories - Microbiology
   · Interscience separately markets preparation and reading equipment alongside combined incubation-and-counting equipment. ([interscience.com](https://www.interscience.com/en/products/))

4.4.3.2. Accountable monitoring records across food-business sites

Multisite food businesses can address fragmented monitoring records through a coordinated equipment-and-service relationship where central oversight is an explicit need. Testo markets such a bundle as well as standalone thermometers. ■■■■■■■ ■■■■■■■ ■■ ■■■■■■■■ ■■■■■■■■ ■■■■■ ■■■■■■ ■■■■■■■■■■■■■■■ ■■■ ■■■■■ ■■■■■■■■ ■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■ ■■■ ■■■■ ■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■

Sources & Evidence

1. Digital Food Safety Management with testo Saveris Food
   · Testo's UK Saveris Food offering combines stationary monitoring, handheld instruments, software, and services for food-business settings. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
2. Food Thermometers - Testo
   · Testo separately markets food thermometers, including testo xx.xx-IR, for professional kitchens, restaurants, and supermarkets. ([testo.com](https://www.testo.com/en-UK/products/food-thermometers))

4.4.3.3. Authorized local supply and handover for a defined territory

Country-specific equipment handover is an opportunity where the buyer needs an accountable local commercial interface. The announced DKSH-Hygiena Malaysian relationship assigns commercialization and after-sales functions. ■■■ ■■■■■■■■■■ ■■■■■■■ ■■ ■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■ ■■■ ■■ ■■■■■■■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■ ■■ ■■ ■■■■■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■■

Sources & Evidence

1. DKSH and Hygiena® Expand Partnership to Deliver Food Safety and Health Diagnostics Solutions in Malaysia
   · The January xx.xx 2025 Malaysian announcement assigns DKSH marketing, sales, distribution, and after-sales functions for Hygiena offerings including ATP cleaning-verification systems. ([dksh.com](https://www.dksh.com/my-en/home/media/news/dksh-and-hygiena-expand-partnership-to-deliver-food-safety-and-health-diagnostics-solutions-in-malaysia))

4.4.3.4. Complete reader packages aligned with a bounded acceptance record

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Sources & Evidence

1. FGIS Performance Verified Aflatoxin Test Kits
   · FGIS lists RIDA QUICK Aflatoxin RQS with RIDA SMART BOX and RIDA SMART APP for corn, alongside other reader-associated alternatives. ([ams.usda.gov](https://www.ams.usda.gov/sites/default/files/media/FGISApprovedMycotoxinRapidTestKits.pdf))

4.4.4. Key Challenges

4.4.4.1. Equipment fulfillment must cover the buyer's full lifecycle package

A purchase can require a complete handover and continuing support commitment. AFBI's published LC-MS tender included installation, commissioning, training, additional warranty, and preventive maintenance. ▪ ▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪

Sources & Evidence

1. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
   - The procurement package supports the need to allocate handover and continuing support obligations.

4.4.4.2. Connected equipment does not automatically deliver accepted reporting

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Sources & Evidence

1. Compliance Order for All Laboratories - FSSAI, I/35118/2026
   - The order requires prompt uploading of reports to InFoLNet and accurate profiles, supporting a reporting obligation separate from equipment-generated records.
2. ProdX - The Next Level in Product Safety
   - Inspection-data functionality does not establish integration with InFoLNet or automatic fulfillment of prescribed reporting.

4.4.4.3. Local channel accountability must be established contract by contract

Indirect reach does not settle service responsibility. Hygiena lists affiliate offices and distributors, while Mettler-Toledo's company-wide filing describes indirect arrangements in which distributors assume further end-customer obligations. ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪

Sources & Evidence

1. Mettler-Toledo International Inc. - 2025 Form 10-K
   · Mettler-Toledo's company-wide filing describes indirect arrangements where distributors assume further end-customer obligations; this does not establish a particular food-equipment contract. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
2. About Us - Hygiena
   · Hygiena identifies affiliate offices and a distributor network. The page establishes described channel reach, not the warranty authority or service obligations of a specific intermediary. ([hygiena.com](https://www.hygiena.com/about-us))

4.5. Porter's Five Forces Analysis

Competitive rivalry is application-specific rather than a contest among interchangeable instruments. Thermo Fisher Scientific and METTLER TOLEDO both describe food inspection offerings, whereas a laboratory reader or sample-preparation device addresses a different purchasing requirement. ■■■■■■ ■■■■ ■■■■■■■■■■■ ■■■■■■■ ■■■■ ■■■■■ ■■■■■■■■■ ■■■■■ ■■■■■■■ ■■■ ■■■■ ■■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■■■■■■■ ■■■■■■ ■■■■■■■ ■■■■■■■■■■■ ■ ■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■

Entry barriers include the ability to contract for dependable fulfillment, while supplier leverage depends on the surrounding equipment ecosystem. ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■ ■■■■■■■■■■ ■■■■■ ■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■ ■■■■■■■■■■■ Patents require product-specific assessment: Mettler-Toledo's filing states that no individual patent or related patent group is material to its business, which qualifies a blanket patent-lockout explanation without establishing freedom to operate for an entrant.

Counterforces prevent a universal lock-in conclusion. Agilent offers support for non-Agilent chromatography and mass spectrometry instruments, subject to the applicable service scope. ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■ ■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■ ■■■■■■■■ ■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■■■■■■ ■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■■■■ ■ ■■■■■■■■ ■■■■■■■■ ■■■■■ ■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■■■■■■ ■■■ ■■ ■■■■■ ■■■■■ ■■ ■■■ ■■■■■■■■■■ ■■■■■ ■■■■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■■■■■■■ ■■■■■■■■■■■ ■■ ■■■■■■■■■■■ ■■■■■■■■■■■■

Sources & Evidence

1. Ramping Up Singapore's Food Testing Capabilities
   · The documented external laboratory route qualifies a universal equipment-ownership model.
2. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
   · The tender illustrates buyer-defined fulfillment requirements beyond hardware.
3. Food and Beverage - Thermo Fisher Scientific
   · Its inspection portfolio provides a documented alternative supplier example without establishing product interchangeability.
4. Product Inspection Systems - METTLER TOLEDO
   · The described inspection portfolio supports an application-bounded competition analysis.

5. GENE-UP - bioMérieux
   - Associated applications and support provide a supported premise for conditional switching-dependency analysis.
6. Mettler-Toledo International Inc. - 2025 Form 10-K
   - The filing says no individual patent or related patent group is material to the business, qualifying a blanket patent-lockout explanation.
7. Multi-Vendor Services - Agilent
   - The multi-vendor offering is counterevidence to universal original-manufacturer service exclusivity.
8. X-ray Inspection Services with X-ray Reclaim
   - Temporary inspection and rental offerings qualify a universal permanent-ownership model without proving equivalence for continuous inspection requirements.

4.6. PESTLE Analysis

[redacted] In the EU, plastic food-contact materials require declarations of compliance supported by documentation. Consequently, retail monitoring and packaging-compliance equipment address different obligations, purchasers, and acceptance conditions.

Trade-policy changes can redistribute costs after an equipment contract is signed. [redacted] Cross-border equipment contracts should identify responsibility for duties, subsequent adjustments, and customer credits rather than assume an unchanged tariff burden.

Macroeconomic exposure also differs from regulatory exposure. [redacted] Budget authorization and procurement milestones are therefore more useful commitment indicators than regulatory obligations alone.

[redacted] Walmart requires applicable supplier audits, inspections, tests, and access to records, while Testo describes equipment connected with software and services for food-safety documentation. This creates a commercial rationale for auditable records, but buyers must distinguish an equipment supplier's functionality claims from acceptance by their own customer or regulator.

Environmental obligations affect market access and lifecycle contracting. For electrical and electronic equipment within the EU WEEE regime, national registration and waste-management responsibilities can attach to manufacturers, distributors, and sellers. [redacted]

RESEARCH SAMPLE REPORT

[redacted]

Sources & Evidence

1. Legislation - Food Contact Materials
   · The plastic food-contact documentation chain establishes a distinct regulatory purchasing context, not a mandate for every manufacturer to own analytical equipment.
2. Devolution Grants to Build Skills Training Infrastructure in Agrifood
   · The announcement illustrates project-specific, earmarked capital support rather than a general equipment purchasing obligation.
3. FDA Food Code
   · FDA describes the Food Code as a model used by local, state, tribal, and federal regulators to develop or update retail and foodservice rules. Publication of a model does not establish identical local applicability. ([fda.gov](https://www.fda.gov/food/retail-food-protection/fda-food-code))
4. WEEE Responsibilities
   · Your Europe describes national registration and waste collection, treatment, recycling, and recovery responsibilities for parties supplying covered electrical and electronic equipment. Application to a particular instrument requires classification. ([europa.eu](https://europa.eu/youreurope/business/product-rules-compliance/recycling-waste-management/weee-responsibilities/index_en.htm))
5. Digital Food Safety Management with testo Saveris Food
   · Connected monitoring and documentation are supplier-described functions, not independently established customer approval.
6. Mettler-Toledo International Inc. - 2025 Form 10-K
   · The filing identifies customer capital-expenditure delays during economic downturns as a risk, not an observed outcome across the studied market.
7. Mettler-Toledo International Inc. Reports Second Quarter 2026 Results
   · Mettler-Toledo's second-quarter 2026 results disclose government tariff refunds and related customer refunds. This dated company event supports a bounded contract-allocation inference, not a general claim about prevailing tariff rates. ([investor.mt.com](https://investor.mt.com/news/news-details/2026/Mettler-Toledo-International-Inc--Reports-Second-Quarter-2026-Results/default.aspx))
8. Audits, Certifications and Testing - Walmart
   · The policy establishes customer evidence obligations distinct from a supplier's equipment functionality claims.

4.7. Market Outlook

The outlook through 2032 is conditional upgrading of accepted evidence capability rather than an automatic progression toward equipment ownership. FDA's preventive-controls framework connects equipment use with application-specific obligations, while US LAAF and EU official-control arrangements preserve separate laboratory-access gates. [redacted]

[redacted]

Suppliers should therefore monitor changes in accepted activity, funded procurement, and support continuity. Regulatory announcements or broader product catalogs alone do not establish an executable opportunity, and the direction of purchasing remains sensitive to who operates the equipment and controls the budget.

Sources & Evidence

1. FSMA Final Rule for Preventive Controls for Human Food
   · The preventive-controls framework establishes application-dependent evidence obligations, not a universal equipment-acquisition requirement. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-preventive-controls-human-food))
2. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
   · LAAF applies to specified testing circumstances and connects covered import-related obligations with accredited laboratory scope and applicable compliance dates. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/laboratory-accreditation-analyses-foods-laaf-program-final-rule))
3. Legislation on Official Controls
   · EU official-control laboratory designation normally requires EN ISO/IEC xx.xx accreditation, with specified permanent and temporary derogations. ([food.ec.europa.eu](https://food.ec.europa.eu/horizontal-topics/official-controls-and-enforcement/legislation-official-controls_en))
4. X-ray Inspection Services with X-ray Reclaim
   · METTLER TOLEDO markets off-site inspection, mobile services, and X-ray equipment rentals, establishing alternatives for suitable bounded requirements. ([mt.com](https://www.mt.com/us/en/home/products/Product-Inspection_1/x-ray-inspection-services.html?cmp=als_xray-reclaim))

4.7.1. Near-Term Market Outlook (0-2 Years)

During 2026-2027, compliance milestones should trigger buyer qualification rather than speculative equipment commitments. The US pre-harvest agricultural-water compliance date for covered very small farms producing non-sprout produce is April xx.xx 2027. ■■■ ■■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■ ■■■ ■■■■■■■■■■■■■ ■■■■■■■■■ ■ ■■■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■ ■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■ ■■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■ ■■ ■■■ ■■■■■■■■■■ ■■■■■■ ■■■■■■■■ ■■■■■■■■■■■ ■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■

Application-certification milestones require a different response. ■■■■ ■■■■■ ■■■■■■ ■■■ ■■■■■ ■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■ ■ ■■■■■■ ■■■■■ ■■■■■ ■■■■■■■■■■■ ■■■■■■■ ■■ ■■■■■ ■■■■■■■ ■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■ ■■■■■■■■■■ ■■ ■■■■■■■■ ■■■■■■■■■■ ■■ ■■■ ■■■■■■■■ ■■ ■■■■■■■ ■■■■■■■■ ■■■ ■■■ ■■■■■■■■ ■■ ■■■■■ ■■■■■■ ■■■■■■■ ■■■■ ■■■ ■■■■■■■■■ ■■■■■ ■■■■■■■■■■■ ■■■ ■■■ ■■■■■ ■■■■■■ The observable trigger is the applicable updated acceptance record, not an assumed platform replacement.

Sources & Evidence

1. FSMA Final Rule on Pre-Harvest Agricultural Water
   · The covered non-sprout pre-harvest agricultural-water framework uses systems-based assessments; the compliance date for very small farms is April xx.xx 2027. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-pre-harvest-agricultural-water))
2. FGIS Performance Verified Aflatoxin Test Kits
   · The R-Biopharm pairing's listed certificate expiration is August xx.xx 2027; expiry does not establish that renewal will fail. ([ams.usda.gov](https://www.ams.usda.gov/sites/default/files/media/FGISApprovedMycotoxinRapidTestKits.pdf))

4.7.2. Medium-Term Market Outlook (3-5 Years)

During 2028-2029, service renewal can become a purchasing decision before hardware replacement. ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪ The indicator favoring consolidation is matched contractual coverage, not a general promise of simpler laboratory management.

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Sources & Evidence

1. Compliance Order for All Laboratories - FSSAI, I/35118/2026
   · FSSAI's February xx.xx 2026 order directs notified laboratories to remain within NABL scope, follow prescribed reporting formats, and upload reports promptly to InFoLNet. ([fssai.gov.in](https://www.fssai.gov.in/upload/advisories/2026/xx.xx/699855f2b69d3Compliance%20Order%20for%20All%20Laboratories.pdf))
2. FDA Food Code
   · FDA describes the Food Code as a model used by regulatory jurisdictions to develop or update their own retail and foodservice rules. ([fda.gov](https://www.fda.gov/food/retail-food-protection/fda-food-code))
3. EnSURE Touch ATP Luminometer for Hygiene Monitoring
   · Optional connected analysis provides counterevidence to treating equipment renewal as mandatory replacement of the buyer's entire records architecture. ([hygiena.com](https://www.hygiena.com/hygiene-monitoring/atp-cleaning-verification/ensure-touch/hygiena-ensure-touch))

4. Multi-Vendor Services - Agilent
   · Agilent offers maintenance, repair, and compliance support for non-Agilent chromatography and mass spectrometry instruments, with plans distinguished by instrument and region. ([agilent.com](https://www.agilent.com/en/s/maintenance-repair/service-plans/multi-vendor))

4.7.3. Long-Term Market Outlook (5-10 Years)

During 2030-2032, a defensible renewal strategy should compare continued supported use, new equipment, and eligible certified pre-owned equipment rather than assume a standard replacement cycle. Agilent's documented pre-owned program establishes a commercial alternative with warranty and support options, not guaranteed future eligibility or suitability. [redacted] Circular acquisition is unsuitable if accepted functionality, continuing support, or destination obligations cannot be maintained; a supported new purchase remains the alternative. Neither refurbishment nor centralized purchasing independently establishes a superior environmental or economic outcome.

Sources & Evidence

1. WEEE Responsibilities
   · For covered electrical and electronic equipment, WEEE responsibilities include national registration and collection, treatment, recycling, and recovery obligations. ([europa.eu](https://europa.eu/youreurope/business/product-rules-compliance/recycling-waste-management/weee-responsibilities/index_en.htm))
2. The Circular Economy & Agilent's Certified Pre-Owned Instruments Program
   · Agilent's certified pre-owned program advertises a manufacturer warranty and installation, training, and service options; future instrument eligibility is not guaranteed. ([agilent.com](https://www.agilent.com/about/newsroom/media-room/cpo.html))
3. Agilent Product Recycling Program
   · Agilent distinguishes product and regional eligibility and identifies local laws, distributor arrangements, contracts, and appointed providers as factors affecting recycling options. ([agilent.com](https://www.agilent.com/environment/product/index.shtml))

4.8. Go-to-Market Strategy

[redacted] An incumbent can compete on continuity of its supported application package; bioMérieux's GENE-UP proposition illustrates associated applications and instrument support. An entrant must establish a matched commercial package rather than rely on a shared platform label.

Use indirect entry only where the partner contributes documented selling authority and delivery capability. DKSH's Malaysian Hygiena relationship provides an evidenced commercialization and after-sales route, but its Indonesian food-and-beverage remit is described as Sumatra-specific. ■■■■■■ ■■■■■■■ ■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■ ■■■■ ■■■ ■■■■■■ ■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■ ■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■ ■■■■■■■ ■■ ■■ ■■■■■■■■■■■ ■■■■■ ■■■ ■■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■■■■■■■■■■■■■ ■■■■■■■■ ■■ ■■■■■■■ ■■ ■■■■■■■■■■■ ■■■ ■■■■■■ ■■■■■ ■■■■■■■■■■■■■■■■ ■■■■ ■■■ ■■■■■■■ ■■■■■■■■■

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■■■■■ ■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■ ■■■■ ■■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■ ■■■■■■ ■■■■■ ■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■ ■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■■■ ■■ ■■■■■■■■■■■■■ ■■■■■■■■■■■■ Settle protection at ordering where required: Interscience makes warranty extension purchase-time dependent and local service availability conditional. Contract acceptance, not catalog breadth, should trigger delivery commitments.

Sources & Evidence

1. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
   - Food owners and consignees can be required to use an accredited laboratory without themselves becoming equipment operators. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/laboratory-accreditation-analyses-foods-laaf-program-final-rule))
2. GENE-UP - bioMérieux
   - bioMérieux associates GENE-UP with food-related applications and advertises installation, IT integration, training, maintenance, repairs, and remote support. ([biomerieux.com](https://www.biomerieux.com/corp/en/our-offer/industry-products/gene-up-automated-pathogen-detection.html))
3. Audits, Certifications and Testing - Walmart
   - Walmart's supplier policy establishes a customer evidence-acceptance relationship distinct from equipment purchasing authority. ([corporate.walmart.com](https://corporate.walmart.com/suppliers/requirements/audits-and-certifications))
4. METTLER TOLEDO - General Distribution Terms
   - METTLER TOLEDO's distribution terms define product and territory appointments and assign distributors after-sales capability and corresponding customer warranty work. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

5. Service Offers - Interscience
   · Interscience makes service availability area-dependent; warranty extension is available only at equipment purchase and requires registration. ([interscience.com](https://www.interscience.com/en/support/services/service-offers?lang=en))
6. DKSH and Hygiena® Expand Partnership to Deliver Food Safety and Health Diagnostics Solutions in Malaysia
   · The announced Malaysian relationship documents a local commercialization-and-support contribution, not an indefinitely available appointment for another supplier. ([dksh.com](https://www.dksh.com/my-en/home/media/news/dksh-and-hygiena-expand-partnership-to-deliver-food-safety-and-health-diagnostics-solutions-in-malaysia))
7. Driving Market Expansion for Hygiena's Diagnostic Solutions in Southeast Asia
   · DKSH's August xx.xx 2025 account describes territory- and sector-specific Hygiena appointments, including Sumatra rather than nationwide Indonesian food-and-beverage coverage. ([lab-solutions.dksh.com](https://lab-solutions.dksh.com/insights/driving-market-expansion-for-hygienas-diagnostic-solutions-in-southeast-asia/))
8. Terms and Conditions | DKSH Malaysia LabShop
   · LabShop terms identify DKSH Technology Sdn Bhd and require separate business-to-business arrangements, while retaining product fulfillment and support obligations with DKSH. ([labshop.dksh.com.my](https://labshop.dksh.com.my/shop/terms-and-conditions))
9. Company - IUL
   · IUL explicitly advertises OEM products alongside microbiology equipment and food-related reader activity; a specific sourcing agreement is not established. ([iul-instruments.com](https://iul-instruments.com/company/))
10. ID 6121155 - AFBI - CSB - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer with Linear Ion Trap Functionality
    · AFBI's public notice combines LC-MS supply with installation, commissioning, training, warranty, and maintenance obligations. ([sell2wales.gov.wales](https://www.sell2wales.gov.wales/search/show/search_view.aspx?ID=MAR598215&catID=))

5. Market Insights

5.1. Consumer Insights & End-User Perspective

The buyer's job is to obtain evidence accepted by the party controlling the food-supply relationship, not simply to acquire a named instrument. ■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■ ■■■■■■ ■■ ■■■■■■■ ■■■■ ■■■ ■■■■■■■■■■ ■■■ ■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■ ■■■■ ■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■ ■■■ ■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■■■ An equipment supplier's documentation features do not themselves confer customer acceptance.

AFBI's December 2025 LC-MS tender couples supply with installation, training, warranty, and maintenance. Training and delivery are pass/fail criteria; a possible additional purchase requires further funding and budgetary approval. ■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■ ■■■■■■■■ ■■■■■■ ■■■■■■■■■■■■■ ■■■■ ■■ ■ ■■■■■■■■ ■■■■■■■ ■■ ■■■■■■■■ ■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■■■■■ ■■■ ■■■■■ ■■■■ ■■ ■■■■■■■■■■ ■■■■ ■■■■■■■■ ■■ ■■■■■■■

The organization needing accepted results also need not be the equipment purchaser. FDA's LAAF framework places specified laboratory-use obligations on food owners and consignees. ■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■ ■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■ ■■■■■■■■■ ■■■■■ ■■■■■■■■■■■■ ■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■■■■ ■■■■■■■■ ■ ■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■ ■■ ■■ ■■■■■■■■■ ■■■■■■■■■■■■

Sources & Evidence

1. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
   · FDA places specified obligations on food owners and consignees to use LAAF-accredited laboratories; this is distinct from requiring those businesses to own equipment. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/laboratory-accreditation-analyses-foods-laaf-program-final-rule))
2. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
   · AFBI's December xx.xx 2025 tender includes installation, training, warranty, and maintenance; training and delivery are pass/fail criteria. An optional additional acquisition requires further funding and budgetary approval. ([find-tender.service.gov.uk](https://www.find-tender.service.gov.uk/Notice/xx.xx-2025/PDF))
3. Audits, Certifications and Testing - Walmart
   · Walmart requires suppliers to obtain applicable audits, inspections, and tests, provide results, and make products, facilities, and records available. This establishes customer evidence obligations, not a prescribed equipment purchase. ([corporate.walmart.com](https://corporate.walmart.com/suppliers/requirements/audits-and-certifications))

5.2. Consumer Experience Benchmarking

Connected hygiene-monitoring instruments provide a defensible purchasing-role comparison, but their connectivity does not establish equivalent analytical performance. Hygiena describes EnSURE Touch with direct Wi-Fi synchronization to SureTrend and remote training and support. ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■ ■■■■ ■■■■■■■■■■■■■■■■■

[redacted]

Kikkoman also provides an application version without cloud functionality. This is a documented counterexample to the assumption that centralized cloud operation is unavoidable. [redacted]

[redacted] Buyers should compare the actual regional undertaking, update responsibility, and escalation arrangements. A feature list is not an adequate proxy for the support experience available at the installation site.

Sources & Evidence

1. EnSURE Touch ATP Luminometer for Hygiene Monitoring
   · Hygiena describes EnSURE Touch as a handheld hygiene-monitoring instrument with direct Wi-Fi synchronization to SureTrend and remote training and support functionality. These are supplier-described capabilities, not comparative outcome evidence.
   ([hygiena.com](https://www.hygiena.com/hygiene-monitoring/atp-cleaning-verification/ensure-touch/hygiena-ensure-touch))
2. Lumitester Smart - Kikkoman Biochemifa
   · Kikkoman Biochemifa describes Lumitester Smart as a portable hygiene-monitoring luminometer with application-based data visualization and cloud access. This supports a purchasing-role comparison, not analytical equivalence.
   ([biochemifa.kikkoman.com](https://biochemifa.kikkoman.com/e/products/detail/?id=xx.xx))
3. Lumitester Smart Manual and App
   · Kikkoman's support page describes centralized multisite cloud management and also provides an application version without cloud functionality, establishing a documented alternative data arrangement.
   ([biochemifa.kikkoman.com](https://biochemifa.kikkoman.com/e/support/dl/smart/?utm_source=openai))
4. Software Care for Product Inspection
   · METTLER TOLEDO defines Product Inspection Software Care through support, license, and service-level agreements, with remote support and software updates. It expressly states that software services are not available in all regions.
   ([mt.com](https://www.mt.com/us/en/home/service/software-care/product-inspection-software-care.html))

5.3. Opportunity Mapping

[redacted] A specialist supplier can address an identified equipment gap while the laboratory retains suitable assets. A combined purchase remains preferable when consolidating responsibility is itself valuable; selective renewal becomes

unsuitable if retained equipment or cross-supplier support cannot sustain the required application.

[redacted] Suppliers should qualify the complete accepted pairing, continuing software and associated-product relationship, and local support. Buyers gain a credible alternative only when these elements match; an additional reader brand without the accepted application does not improve the choice set.

Food Retailers and Foodservice Operators with explicit central-oversight requirements are candidates for coordinated monitoring and records packages. [redacted] Central visibility is an opportunity only where it addresses a documented management gap, not because every site requires a new software relationship.

[redacted] Covered US cabinet X-ray systems add manufacturer documentation and installation-location obligations. A combined route is unsuitable when these responsibilities remain divided without an accountable counterparty.

Malaysia provides a named local hygiene-equipment procurement lead: DKSH LabShop advertises Hygiena EnSURE Touch. Its business-to-business terms require separate customer arrangements, and the documented regional appointments have territorial limits. [redacted]

[redacted] NIFA's shared-instrument program identifies another funding route for eligible institutions, not a purchase award. Suppliers should commit bid and support resources against the actual procurement and funding milestone, preserving the distinction between food-safety use and broader shared institutional activity.

Sources & Evidence

1. Products and Accessories - Microbiology
   · The portfolio supplies distinct purchasing functions, supporting comparison of selective renewal with combined equipment without establishing retained-asset compatibility. ([interscience.com](https://www.interscience.com/en/products/))
2. Digital Food Safety Management with testo Saveris Food
   · Restaurants, catering, and distribution centers are identified settings for the coordinated monitoring-and-records proposition. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
3. Cabinet X-Ray Systems (Closed X-Ray Systems) - FDA
   · FDA identifies food inspection as a cabinet X-ray application and separates manufacturer reporting and product obligations from OSHA or state oversight of use. ([fda.gov](https://www.fda.gov/radiation-emitting-products/security-systems/cabinet-x-ray-systems-closed-x-ray-systems))
4. Equipment Grants Program - NIFA
   · NIFA's Equipment Grants Program supports eligible higher-education institutions acquiring shared instruments for food and agricultural sciences; program eligibility is not an award. ([nifa.usda.gov](https://www.nifa.usda.gov/grants/funding-opportunities/equipment-grants-program))
5. FGIS Performance Verified Aflatoxin Test Kits
   · The official listing associates named equipment and software with a particular application and commodity, rather than granting universal reader acceptance. ([ams.usda.gov](https://www.ams.usda.gov/sites/default/files/media/FGISApprovedMycotoxinRapidTestKits.pdf))
6. Mix and Match Your Ideal Combination Inspection System
   · METTLER TOLEDO markets standalone and combination inspection systems with associated connectivity, service, and training support. ([mt.com](https://www.mt.com/us/en/home/library/product-brochures/product-inspection/PI/Combinations_Brochure.html))
7. Food Thermometers - Testo
   · The standalone instrument catalog provides an alternative to purchasing a broader digital-management bundle. ([testo.com](https://www.testo.com/en-UK/products/food-thermometers))
8. Hygiena EnSURE Touch Instrument ETOUCH | DKSH Malaysia LabShop
   · DKSH Malaysia LabShop advertises Hygiena EnSURE Touch through a quotation route; the listing is not proof of completed delivery. ([labshop.dksh.com.my](https://labshop.dksh.com.my/shop/p/hygiena-ensure-touch-instrument-etouch-tecpim000531181))
9. Driving Market Expansion for Hygiena’s Diagnostic Solutions in Southeast Asia
   · The described appointment boundaries qualify a region-wide access assumption; continuing rights require transaction-specific confirmation. ([lab-solutions.dksh.com](https://lab-solutions.dksh.com/insights/driving-market-expansion-for-hygienas-diagnostic-solutions-in-southeast-asia/))
10. Terms and Conditions | DKSH Malaysia LabShop
    · The terms distinguish the operating seller from payment processing and do not replace an institutional customer's equipment-specific agreement. ([labshop.dksh.com.my](https://labshop.dksh.com.my/shop/terms-and-conditions))
11. ID 6121155 - AFBI - CSB - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer with Linear Ion Trap Functionality
    · The notice published March xx.xx 2026 names AB SCIEX UK LIMITED; an additional acquisition remains funding- and budget-dependent. Estimated contract dates do not prove delivery. ([sell2wales.gov.wales](https://www.sell2wales.gov.wales/search/show/search_view.aspx?ID=MAR598215&catID=))

5.4. Distribution Channel Analysis

Direct Sales and Distributor and Reseller Sales differ in the contracting relationship, not merely in customer reach. METTLER TOLEDO's sales terms describe manufacturer order acceptance, while its distribution terms place appointed resellers in their own-name transactions for specified products and territories and allocate corresponding warranty work to them. ■■■■■■ ■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■ ■■■■■■ ■■■■■ ■■ ■■■■■■■■■■■

Local partners can contribute an established equipment-and-service relationship. Ishida's Nikas case study identifies its partner Europack alongside the manufacturer in the customer's account of an installed inspection system. ■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■ ■■■■■■■■ ■■■■■■ ■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■ ■■■ ■■■■■■■■■■■■■■■ ■■■■■■ ■■■ ■■■■■ ■■■■■■ ■■■■■■■■ ■ ■■■■■■ ■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■ ■■■■ ■■■■ ■■ ■■ ■■■■■■■■■■■■ ■■■■■■■ ■■■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■■ ■ ■■■■■■■■ ■■■■■■■■■■ ■■■ ■■ ■■■■ ■■■ ■■■■■■ ■■■■■■■■■■ ■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■

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Independent Testing Laboratories can therefore assess a consolidated service relationship as an alternative to separate original-manufacturer arrangements. The option remains conditional on coverage of the particular instruments and location, with coordination and responsibility for exclusions established before switching.

Sources & Evidence

1. Multi-Vendor Services - Agilent
   · Agilent offers repair, maintenance, and compliance support for non-Agilent chromatography and mass spectrometry instruments. Its service resources distinguish instrument- and region-specific plans. ([agilent.com](https://www.agilent.com/en/s/maintenance-repair/service-plans/multi-vendor))
2. Mettler-Toledo Standard Terms and Conditions for Sales and Service
   · METTLER TOLEDO's standard sales terms describe order acceptance through written confirmation or execution. They establish a contractual route rather than proof of identical local fulfillment. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
3. METTLER TOLEDO - General Distribution Terms
   · METTLER TOLEDO's distribution terms define nonexclusive appointments for specified territories and products. Distributors transact in their own name and undertake corresponding customer warranty work under their service obligations. ([mt.com](https://www.mt.com/se/sv/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
4. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
   · Ishida's Nikas case study reports an installed X-ray inspection system and identifies Ishida and its partner Europack in the customer's account of the equipment and service relationship. This is supplier-reported deployment evidence. ([ishidaeurope.com](https://www.ishidaeurope.com/media/x4jbsxoh/nikas-gr-ix-pd-for-fresh-chicken-eng-tg-approved-xx.xx.pdf))

5.5. Pricing Trend Analysis

Quotation comparability depends on the contracted package. ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ Procurement should reconcile these obligations before comparing offers; a hardware-only offer and a supported installation are different commercial commitments.

Associated subscriptions introduce renewal and exit conditions beyond equipment ownership. SureTrend's published service terms specify advance recurring payment and written nonrenewal notice xx.xx days before a new subscription period. ▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪ ▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪ ▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪

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Sources & Evidence

1. Mettler-Toledo International Inc. - 2025 Form 10-K
   - The filing identifies deferred customer capital spending during economic downturns as a business risk. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
2. Mettler-Toledo International Inc. Reports Second Quarter 2026 Results
   - Mettler-Toledo's July xx.xx 2026 results report both government tariff refunds and related refunds to customers. The event supports a bounded conclusion about contractual adjustment and credits, not a prevailing tariff assumption. ([investor.mt.com](https://investor.mt.com/news/news-details/2026/Mettler-Toledo-International-Inc--Reports-Second-Quarter-2026-Results/default.aspx))
3. Mettler-Toledo Standard Terms and Conditions for Sales and Service
   - The terms exclude installation, shipping, duties, and other specified costs unless included in order documents, and permit adjustments when underlying quotation circumstances change. Package comparability therefore requires order-level reconciliation. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
4. SureTrend Terms of Service
   - SureTrend's published service terms provide for advance recurring payment, automatic renewal, written nonrenewal notice xx.xx days before a new subscription period, and restrictions on partial-period refunds. ([hygiena.com](https://www.hygiena.com/terms-and-conditions-suretrend))
5. SureTrend Food Safety Management Software
   - SureTrend's product page describes monthly or annual subscriptions without long-term commitments and cancellation to prevent future billing. These descriptions require reconciliation with the separate service terms for a particular purchase. ([hygiena.com](https://www.hygiena.com/software/suretrend))

5.6. Regulatory Compliance & Standards Framework

Laboratory recognition and equipment compliance are separate access conditions. In the United States, FDA's Laboratory Accreditation for Analyses of Foods program requires accredited laboratories for specified circumstances, with covered import-related obligations dependent on analyte groups and applicable compliance dates. ■■ ■■■■ ■■■ ■■■■■ ■■■ ■■■■■ ■■■■■■■■ ■■ ■■■ ■■■ ■■■■■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■ ■■■■■■■ ■■■■■ ■■■■■■■■■■■■■■ ■■■■■■■ ■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■ ■■■■■■ ■■■■ ■■■■■ ■■ ■■■■ ■■■■■■■■■■ ■■■■■■■■■■

India adds a reporting obligation to the recognition relationship. FSSAI's February xx.xx 2026 order directs notified laboratories to remain within their NABL accreditation scope, use prescribed report formats, and upload reports promptly to InFoLNet. ■■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■■ ■■■ ■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■ ■■ ■■■ ■■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■ ■■■■ ■■■■■■■■■■■■

Product Safety Inspection Systems can face equipment-specific rules independently of laboratory recognition. ■■■ ■■■■■■■■■■ ■■■■ ■■■■■■■■■■ ■■ ■ ■■■■■■■ ■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■■■■■■■■■■■■■ ■■■■■■■■■■■■■■■■■ ■■■■ ■■ ■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■ A US purchaser should establish the applicable manufacturer documentation and installation-location obligations before commitment; food-safety functionality alone does not settle these separate requirements.

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Sources & Evidence

1. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
   · LAAF implementation for covered import-related testing depends on the applicable analyte group and compliance date. FDA expressly states that the program does not cover all food testing. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/laboratory-accreditation-analyses-foods-laaf-program-final-rule))
2. Legislation on Official Controls
   · The European Commission identifies EN ISO/IEC xx.xx accreditation as a condition for official-control laboratory designation, while describing permanent and temporary derogations under specified circumstances. ([food.ec.europa.eu](https://food.ec.europa.eu/horizontal-topics/official-controls-and-enforcement/legislation-official-controls_en))
3. Compliance Order for All Laboratories - FSSAI, I/35118/2026
   · FSSAI's February xx.xx 2026 order directs notified laboratories to remain within NABL accreditation scope, use prescribed report formats, and upload reports promptly to InFoLNet. Continued noncompliance may trigger action. ([fssai.gov.in](https://www.fssai.gov.in/upload/advisories/2026/xx.xx/699855f2b69d3Compliance%20Order%20for%20All%20Laboratories.pdf))

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   · The filing distinguishes limited whole-product patent protection from infringement exposure that can require licensing or cessation of sales.
   ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
5. Cabinet X-Ray Systems (Closed X-Ray Systems) - FDA
   · FDA identifies food inspection as a cabinet X-ray application and assigns manufacturers applicable radiation-product reporting, importation, and performance-standard obligations. Product use is regulated by OSHA or state government.
   ([fda.gov](https://www.fda.gov/radiation-emitting-products/security-systems/cabinet-x-ray-systems-closed-x-ray-systems))

5.7. ESG & Sustainability Analysis

Environmental criteria can enter equipment purchasing through funding conditions rather than general sustainability preferences. UKRI's FEC grant terms require consideration of energy and waste implications in equipment and maintenance procurement. ■■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■ ■■■■■ ■■■■■ ■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■■ ■■ ■■■■■■■■■■■■ ■■■■ ■■ ■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■ ■■■■■ ■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■ ■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■

Circular purchasing is a documented commercial alternative for analytical equipment. Agilent describes certified pre-owned instruments with a manufacturer warranty and installation, training, and service options, alongside refurbishment and recycling arrangements. ■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■ ■■■■ ■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■ ■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■ ■■■ ■■■■■■■■■■■■■■ ■■■■■ ■■■■ ■■■ ■■■■■■■■■■ ■ ■■■■■■■■ ■■■■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■ ■■■■■■■■■■ ■■■■■ ■■■ ■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■■■

Preventive monitoring creates a different sustainability proposition. ■■■■■ ■■■■■ ■■■■■■■■ ■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■■■■■ ■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■■ ■■■■■■■■ ■■■■■■■■ ■■ ■■■■■■■■■■■■■■ ■■■■■■■■■ ■■ ■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■■■■ Purchasing decisions should assign responsibility for reviewing alerts and addressing exceptions while preserving food-safety obligations; a supplier's waste-reduction proposition is not proof of a realized result.

Sources & Evidence

1. Digital Food Safety Management with testo Saveris Food
   · Testo markets Saveris Food monitoring and documentation for food businesses and describes potential food-waste benefits. Realized waste prevention remains a conditional commercial inference, not an independently demonstrated outcome.
   ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))

2. UKRI Terms and Conditions of FEC Grants
   · UKRI's FEC grant terms require consideration of energy and waste implications when procuring equipment, consumables, and services, including maintenance. This is a scoped funding condition, not a universal food-industry rule. ([ukri.org](https://www.ukri.org/publications/terms-and-conditions-for-research-grants/ukri-terms-and-conditions-of-fec-grants/))
3. The ACT Ecolabel: The Standard for Lab Product Sustainability
   · My Green Lab's ACT program provides independently verified product-level sustainability information for equipment purchasing and supplier comparisons. This supports environmental comparison, not food-safety performance certification. (act.mygreenlab.org)
4. The Circular Economy & Agilent's Certified Pre-Owned Instruments Program
   · Agilent describes certified pre-owned analytical instruments with a manufacturer warranty and options for installation, training, and service coverage. Food-safety suitability remains application-specific. ([agilent.com](https://www.agilent.com/about/newsroom/media-room/cpo.html))
5. Agilent Product Recycling Program
   · Agilent describes refurbishment, resale, trade-in, and recycling arrangements, while distinguishing products and regions not included in its trade-in and buyback programs. Eligibility therefore requires confirmation. ([agilent.com](https://www.agilent.com/environment/product/index.shtml))

5.8. Disruption & Risk Scenarios

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A channel-change scenario would transmit through selling authority, warranty administration, and local support rather than necessarily through equipment functionality. ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪ ▪▪▪ ▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ Additional contractual protection can preserve continuity but adds coordination and may limit channel flexibility.

Subscription exit uncertainty creates a separate commitment risk. SureTrend's product description emphasizes cancellation flexibility, while its service terms prescribe advance written nonrenewal. ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪

Sources & Evidence

1. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
   · Accredited laboratory scopes are a defined acceptance condition for covered LAAF work; scope interruption is analyzed as a scenario, not an observed event. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/laboratory-accreditation-analyses-foods-laaf-program-final-rule))
2. Legislation on Official Controls
   · Official-control designation and accreditation are institutional access conditions; this supports a bounded recognition-interruption scenario rather than a general equipment failure claim. ([food.ec.europa.eu](https://food.ec.europa.eu/horizontal-topics/official-controls-and-enforcement/legislation-official-controls_en))
3. SureTrend Terms of Service
   · SureTrend's service terms prescribe written nonrenewal notice xx.xx days before a new subscription period and restrict partial-period refunds. ([hygiena.com](https://www.hygiena.com/terms-and-conditions-suretrend))
4. SureTrend Food Safety Management Software
   · SureTrend's product page describes cancellation to prevent future billing and no long-term commitments; the applicable purchase terms require reconciliation with separate service terms. ([hygiena.com](https://www.hygiena.com/software/suretrend))
5. METTLER TOLEDO - General Distribution Terms
   · The terms permit termination and distinguish manufacturer obligations from distributor customer undertakings, supporting a conditional channel-continuity scenario. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
6. Driving Market Expansion for Hygiena's Diagnostic Solutions in Southeast Asia
   · Country and sector boundaries establish exposure to appointment changes, without establishing that a termination has occurred. ([lab-solutions.dksh.com](https://lab-solutions.dksh.com/insights/driving-market-expansion-for-hygienas-diagnostic-solutions-in-southeast-asia/))

5.9. Return on Investment & Cost-Benefit Analysis

For a laboratory, the relevant investment comparison is selective functional renewal, a combined equipment purchase, or continued use with a different support arrangement. ■■■■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■ ■■■ ■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■ ■■■■■■■■ ■■■■■■■■ ■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■■ ■■ ■■■■■■■■ ■■■■■ ■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■■■ The decision depends on the actual capability gap, application continuity, handover obligations, service exclusions, and the cost of retaining multiple accountable relationships.

■■■ ■ ■■■■ ■■■■■■■■■■■■ ■■■■ ■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■ ■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■■ ■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■ ■ ■■■■■■■■■■ ■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■ Ownership becomes more defensible when direct control and continuing onsite access are necessary and a supported installation can be contracted. The comparison must retain the same accepted inspection deliverable; a temporary service proposition is not evidence that continuous production-line requirements can be outsourced without consequence.

[redacted] Discretionary rollout funding should depend on an identified administrative problem, signed entitlements, accountable record review, and a clear local support undertaking. Where existing records meet the requirement or no organizational burden is removed, a narrower purchase or deferral is more defensible than attributing avoided recalls or waste to hardware installation alone.

Sources & Evidence

1. Products and Accessories - Microbiology
   · Separately offered and combined functions provide commercial alternatives for a laboratory investment decision; savings are not established by the catalog. ([interscience.com](https://www.interscience.com/en/products/))
2. Digital Food Safety Management with testo Saveris Food
   · Monitoring, documentation, and escalation are supplier-described capabilities; administrative and waste-related benefits remain conditional on organizational use. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
3. Multi-Vendor Services - Agilent
   · The multi-vendor offering allows maintenance-provider comparison without first replacing analytical hardware; universal coverage or realized savings are not established. ([agilent.com](https://www.agilent.com/en/s/maintenance-repair/service-plans/multi-vendor))
4. X-ray Inspection Services with X-ray Reclaim
   · Rental arrangements are described for temporary requirements and maintenance periods; suitability and local commitments remain project-specific. ([mt.com](https://www.mt.com/us/en/home/products/Product-Inspection_1/x-ray-inspection-services.html?cmp=als_xray-reclaim))
5. Food Thermometers - Testo
   · Separately offered thermometers support comparing a narrower measurement purchase with an integrated records relationship. ([testo.com](https://www.testo.com/en-UK/products/food-thermometers))

6. Cumulative Impact of Artificial Intelligence 2026

[redacted] This establishes a bounded feature release, not general adoption or demonstrated labor savings. Buyers should confirm entitlement and retain responsibility for checking imported information against the underlying record.

[redacted] Compatibility, data access, and the supplier's support undertaking therefore matter alongside hardware selection. The offering description does not establish a particular customer's deployment, reduced staffing requirement, or improved safety outcome; these benefits remain conditional.

Governance should preserve named organizational accountability. [redacted] AI adoption is commercially defensible only where integration, review responsibilities, and continuing access to records are established.

Sources & Evidence

1. Compliance Order for All Laboratories - FSSAI, I/35118/2026
   · The reporting obligations attach to FSSAI-notified laboratories. The commercial inference is that automated data extraction does not independently discharge those obligations. ([fssai.gov.in](https://www.fssai.gov.in/upload/advisories/2026/xx.xx/699855f2b69d3Compliance%20Order%20for%20All%20Laboratories.pdf))
2. SureTrend Software Update
   · SureTrend's February 2025 release notes identify AI-assisted certificate-of-analysis uploads as an alpha release for selected customers. March 2025 notes retain the limited-access description and allow missing information to be entered when parsing is incomplete. ([hygiena.com](https://www.hygiena.com/news/suretrend-software-update))
3. A Review of Smart Factories for Manufacturing and How Ishida's Sentinel 5.0 Answers Key Customer Challenges
   · Ishida's March xx.xx 2025 description presents Sentinel xx.xx, unveiled at Gulfood Manufacturing 2024, as AI-enabled cloud monitoring with machine-pattern analysis, alerts, and chatbot support. It does not establish customer-specific realized outcomes. ([ishidaeurope.com](https://www.ishidaeurope.com/en/about-us/case-studies-and-events/news/a-review-of-smart-factories-for-manufacturing-and-how-ishida-s-sentinel-xx.xx-answers-key-customer-challenges-like-no-one-else/))

4. AI Risk Management Framework - NIST
   - NIST describes its AI Risk Management Framework as voluntary guidance for incorporating trustworthiness into AI use and evaluation. It is not a food-equipment authorization or laboratory recognition scheme. ([nist.gov](https://www.nist.gov/itl/ai-risk-management-framework))

7. Food Safety Testing Equipment Market, by Equipment Type

Equipment Type separates complementary purchasing functions rather than interchangeable instruments. Sampling Equipment addresses collection, while Sample Preparation & Handling Equipment supports the laboratory's analytical capability. [redacted]

Test Incubation & Culture-Handling Equipment can overlap commercially with reading equipment. INTERSCIENCE lists a combined real-time incubator and colony counter alongside separate preparation and analysis products. [redacted]

[redacted] Both portfolios also address broader quality-management needs, so catalog membership does not make every feature a food-safety purchasing requirement. The practical choice is between equipment packages matched to the buyer's documented function, with associated software and services assessed as commitments supporting that package.

Figure 8. Global Food Safety Testing Equipment Market Size, by Equipment Type, 2025 (%)

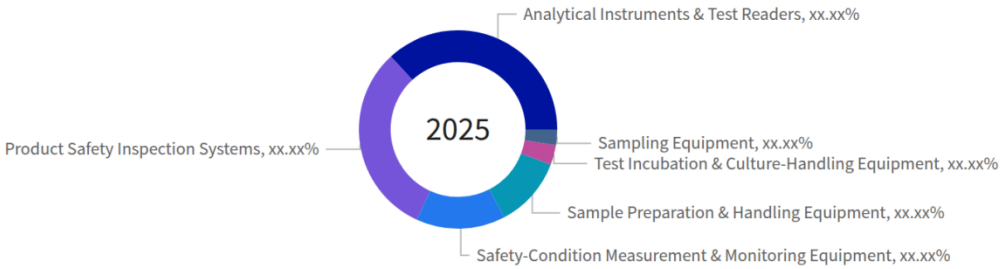

Figure 9. Global Food Safety Testing Equipment Market, by Equipment Type, 2032 (USD Million)

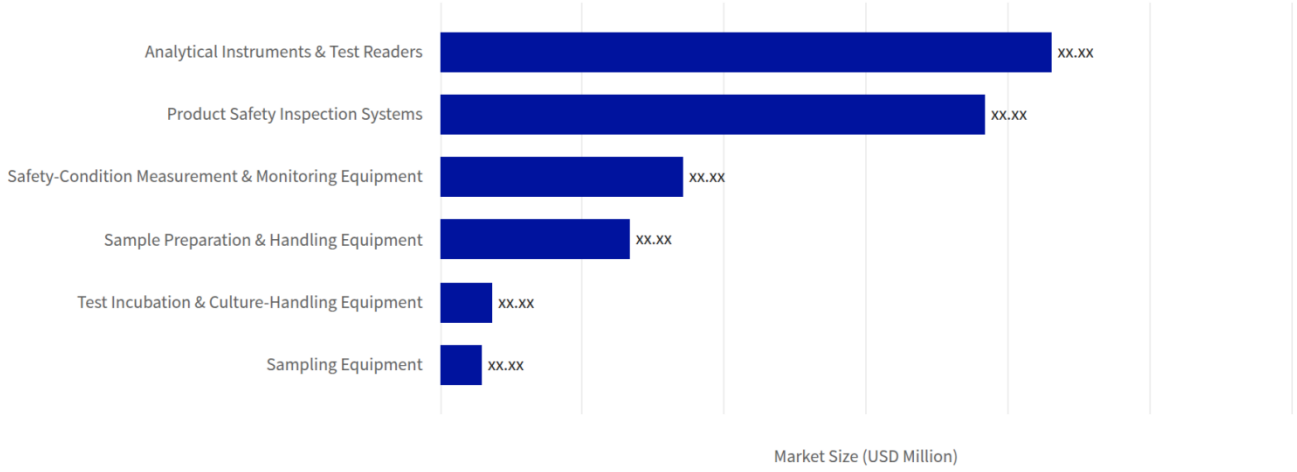

Table 4. Global Food Safety Testing Equipment Market, by Equipment Type growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 5. Global Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Food and Beverage - Thermo Fisher Scientific
   · Thermo Fisher Scientific describes analytical instruments and supporting laboratory equipment within its food-and-beverage portfolio.

2. Products and Accessories - Microbiology
   - INTERSCIENCE lists gravimetric dilutors, laboratory blenders, dispensing pumps, automatic platers, and a combined real-time incubator and colony counter.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
3. Product Inspection Systems - METTLER TOLEDO
   - METTLER TOLEDO lists metal detection, X-ray inspection, vision inspection, and combination systems within a portfolio addressing safety and quality.
4. Digital Food Safety Management with testo Saveris Food
   - Testo describes stationary monitoring, handheld measuring meters, software, and services for documenting food-safety processes.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
5. Professional samplers for food, pharmaceutical, chemical and environmental industries
   - Bürkle's sampler portfolio distinguishes bulk goods, liquids, viscous liquids, and meat, ice cream, and frozen-food applications.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
6. Technical Specifications for Equipment Used in Chemical Analysis of Food - FSSAI
   - Taxonomy evidence: The official catalog distinguishes primary analytical instruments from auxiliary equipment and covers food safety and quality together; it is not an equipment-market partition. ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/Notice_Comments_Chemical_Analysis_Food_21_10_2020_.pdf))
7. Standard Specifications for Setting Up of a Basic Functional Food Analysis Laboratory
   - Taxonomy evidence: Annexure I distinguishes chemical-analysis, microbiology, and supporting equipment. Its Indian food-laboratory scope includes safety and quality; it is not a global market partition or blanket inclusion rule. ([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))

8. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
9. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))

10. Mettler-Toledo International Inc. - 2025 Form 10-K
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))

11. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
    - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
    - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
12. Agilent Technologies - 2017 Annual Report
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
13. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

14. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
15. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
16. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
17. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
18. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
19. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

20. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
21. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

22. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
23. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
24. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
25. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))
26. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

7.1. Analytical Instruments & Test Readers

Table 6. Global Food Safety Testing Equipment Market Size, by Analytical Instruments & Test Readers, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 7. Global Food Safety Testing Equipment Market Size, by Analytical Instruments & Test Readers, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 8. Global Food Safety Testing Equipment Market Size, by Analytical Instruments & Test Readers, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Technical Specifications for Equipment Used in Chemical Analysis of Food - FSSAI

   · Taxonomy evidence: The catalog separately identifies PCR equipment, spectrometers, chromatographs, and an ELISA reader, supporting recognition of analytical hardware rather than consumable kits. ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/Notice_Comments_Chemical_Analysis_Food_21_10_2020_.pdf))

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods - Food Standards Agency
   - Taxonomy evidence: The commissioned review's commercial cost section separately identifies plate readers, PCR instruments, LC-MS instruments, consumables, and service-related costs, supporting hardware-only accounting. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
   - Taxonomy evidence: Quote-based hardware discussion identifies plate readers, real-time PCR instruments, and LC-MS instruments separately from common support equipment. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
3. Standard Specifications for Setting Up of a Basic Functional Food Analysis Laboratory
   - Taxonomy evidence: Lists chromatographs, ICP-MS, spectrophotometers, an ELISA reader, and a digital colony counter as food-laboratory instruments. ([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))
4. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.

30. Brazil Ministry of Agriculture - Accredited Laboratories
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.

31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.

32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.

33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

34. Products and Accessories - Microbiology | INTERSCIENCE
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))

7.2. Product Safety Inspection Systems

Table 9. Global Food Safety Testing Equipment Market Size, by Product Safety Inspection Systems, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 10. Global Food Safety Testing Equipment Market Size, by Product Safety Inspection Systems, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 11. Global Food Safety Testing Equipment Market Size, by Product Safety Inspection Systems, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. BRCGS Global Standard Food Safety, Issue 9

   · Taxonomy evidence: Section xx.xx recognizes food foreign-body detection equipment, including metal-detection, X-ray, and optical systems. Its broader removal-equipment coverage is not imported into this taxonomy.
   ([nifcc.co.uk](https://www.nifcc.co.uk/site/wp-content/uploads/2023/xx.xx/BRCGS_Food_Safety_Standard_Issue_9.pdf))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

7.3. Safety-Condition Measurement & Monitoring Equipment

Table 12. Global Food Safety Testing Equipment Market Size, by Safety-Condition Measurement & Monitoring Equipment, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 13. Global Food Safety Testing Equipment Market Size, by Safety-Condition Measurement & Monitoring Equipment, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 14. Global Food Safety Testing Equipment Market Size, by Safety-Condition Measurement & Monitoring Equipment, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. HACCP Principles & Application Guidelines

   · Taxonomy evidence: Distinguishes hazard testing from monitoring temperature, time, pH, and moisture, supporting a separate safety-condition measurement role. ([fda.gov](https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines))

2. Water Activity (aw) in Foods

   · Taxonomy evidence: Provides a food-safety-linked measurement role for water-activity equipment, distinct from the machinery used to process or preserve food. ([fda.gov](https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/inspection-technical-guides/water-activity-aw-foods))

3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))

16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
34. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
35. Digital Food Safety Management with testo Saveris Food
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))

7.4. Sample Preparation & Handling Equipment

Table 15. Global Food Safety Testing Equipment Market Size, by Sample Preparation & Handling Equipment, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 16. Global Food Safety Testing Equipment Market Size, by Sample Preparation & Handling Equipment, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 17. Global Food Safety Testing Equipment Market Size, by Sample Preparation & Handling Equipment, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Technical Specifications for Equipment Used in Chemical Analysis of Food - FSSAI
   · Taxonomy evidence: The auxiliary-equipment headings recognize homogenizers, centrifuges, sample-extraction hardware, and dispensing equipment. Inclusion in this market still requires food-safety attribution.
   ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/Notice_Comments_Chemical_Analysis_Food_21_10_2020_.pdf))
2. Standard Specifications for Setting Up of a Basic Functional Food Analysis Laboratory
   · Taxonomy evidence: Lists homogenizers, grinding mills, centrifuges, pipettes, evaporators, and microwave digestion systems among supporting equipment.
   ([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))
3. ISO 7218:2024 - Microbiology of the Food Chain - General Requirements and Guidance for Microbiological Examinations, Public Preview
   · Taxonomy evidence: Separately recognizes pipettors, diluters, homogenizers, centrifuges, and filtration/separation equipment.
   ([webstore.ansi.org](https://webstore.ansi.org/preview-pages/iso/preview_iso%252B7218-2024.pdf))

4. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
5. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.

6. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

7. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
8. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
9. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

10. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
11. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

12. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
13. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
14. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
15. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
16. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
17. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

18. Eurofins Scientific - FY 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.

19. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

20. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
- Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

21. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.

22. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.

23. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

24. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
25. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
26. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
27. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
28. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
29. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

30. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
31. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
32. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
33. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
34. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
35. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.

7.5. Test Incubation & Culture-Handling Equipment

Table 18. Global Food Safety Testing Equipment Market Size, by Test Incubation & Culture-Handling Equipment, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 19. Global Food Safety Testing Equipment Market Size, by Test Incubation & Culture-Handling Equipment, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 20. Global Food Safety Testing Equipment Market Size, by Test Incubation & Culture-Handling Equipment, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. ISO 7218:2024 - Microbiology of the Food Chain - General Requirements and Guidance for Microbiological Examinations, Public Preview

   · Taxonomy evidence: Equipment headings distinguish incubators and controlled heating equipment from inoculation hardware, including spiral platers. ([webstore.ansi.org](https://webstore.ansi.org/preview-pages/iso/preview_iso%252B7218-2024.pdf))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
34. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

7.6. Sampling Equipment

Table 21. Global Food Safety Testing Equipment Market Size, by Sampling Equipment, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 22. Global Food Safety Testing Equipment Market Size, by Sampling Equipment, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 23. Global Food Safety Testing Equipment Market Size, by Sampling Equipment, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Dairy Plant - Milk Sample Collector Evaluation Record

   · Taxonomy evidence: The historical dairy-plant record recognizes sample-transfer instruments and in-line samplers, establishing a durable sampling-hardware role rather than current model availability. ([fda.gov](https://www.fda.gov/files/about%20fda/published/Dairy-Plant---Milk-Sample-Collector-Evaluation-Record-%28PDF%xx.xx.pdf))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

8. Food Safety Testing Equipment Market, by Technology Platform

[illegible] Its breadth does not independently establish an electrophoresis purchasing role. A proposed electrophoresis instrument therefore requires a separately documented food-safety offering and a clear distinction between primary analysis and support for another platform.

Nucleic Acid Amplification & Sequencing contains different documented commercial relationships. bioMérieux markets GENE-UP as a PCR Platforms offering for foodborne-hazard detection. [illegible]

Affinity & Biochemical Assay Platforms require attention to the supported application as well as the reader. R-Biopharm markets RIDA CUBE SCAN for enzymatic and colorimetric food-component analysis, including sulfite, demonstrating a non-immunological offering within the broader family. [illegible]

Culture-Based Microbiology, Flow Cytometry, and Bioluminescence & Chemiluminescence likewise should not be treated as interchangeable detection claims. ISO xx.xx recognizes culture enumeration, ATP measurement, and flow cytometry within food-chain analysis; Hygiena's EnSURE Touch illustrates an ATP-based hygiene-monitoring offering. [illegible]

Radiometric Analysis is commercially distinct from X-Ray Imaging: Mirion markets FoodScreen for radiological food screening, whereas METTLER TOLEDO's X-ray systems address physical contamination inspection. Metal Detection and Optical Imaging & Machine Vision also appear

as separate inspection offerings, with vision products addressing labeling and packaging checks. ■■■■■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■ ■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■ ■■■■■■■■■ ■■■■■■ ■■■■ ■ ■■■■■■■ ■■■■■■■■■■ ■■■■■■ ■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■■

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Figure 10. Global Food Safety Testing Equipment Market Size, by Technology Platform, 2025 (%)

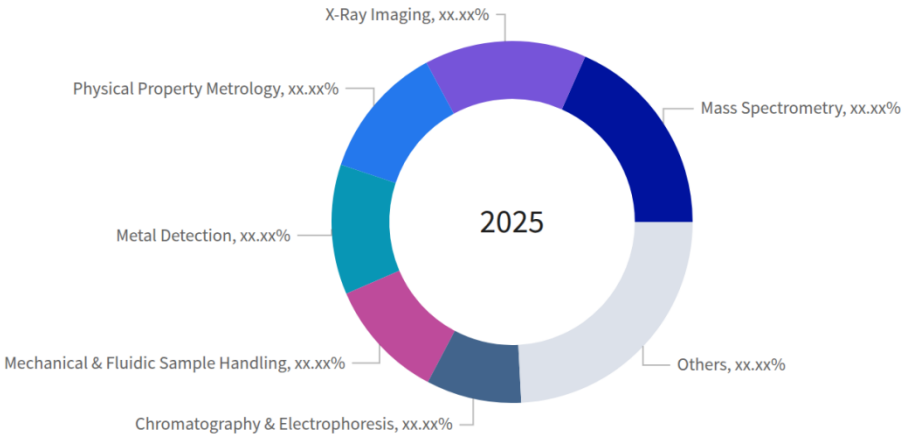

Figure 11. Global Food Safety Testing Equipment Market, by Technology Platform, 2032 (USD Million)

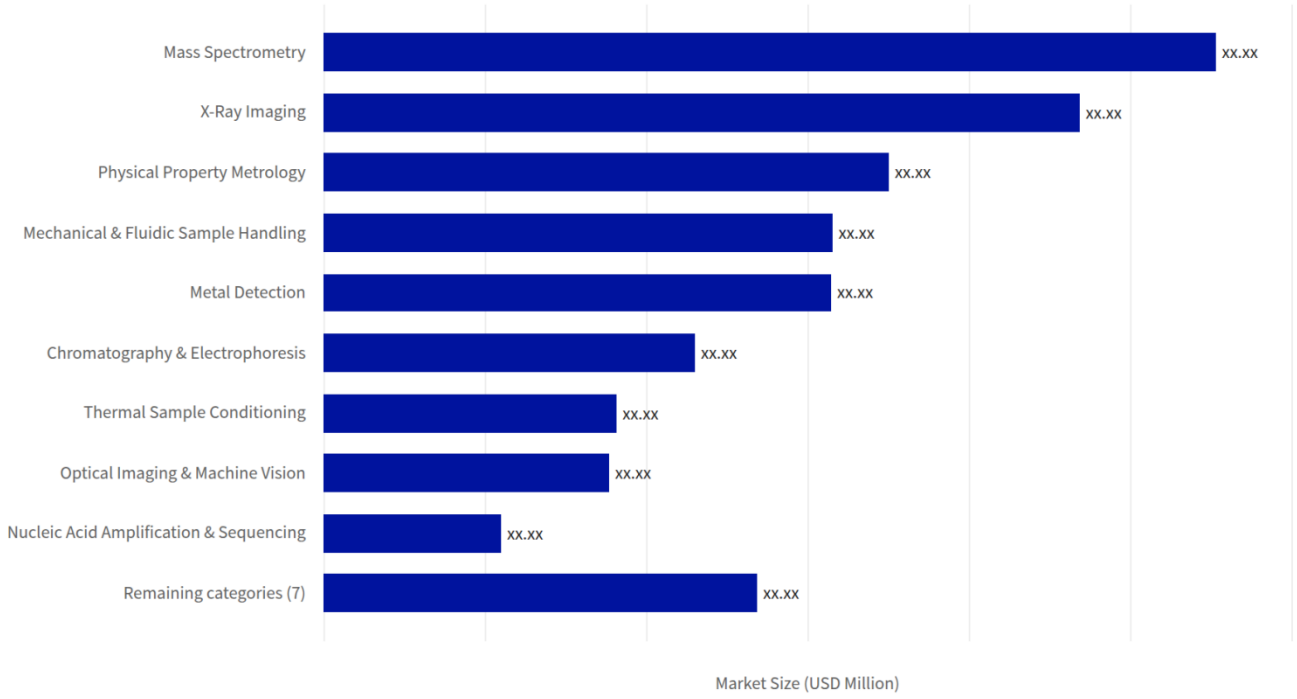

Table 24. Global Food Safety Testing Equipment Market, by Technology Platform growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 25. Global Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. PulseNet Timeline

- CDC documents PulseNet's use of whole-genome sequencing for foodborne-disease surveillance and outbreak detection, establishing an institutional role distinct from a general manufacturer equipment mandate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.

2. Food and Beverage - Thermo Fisher Scientific
   - The portfolio names chromatography, mass spectrometry, spectroscopy, photometric and electrochemical analysis, while also covering authenticity, composition, and quality applications. It does not independently settle the proposed electrophoresis purchasing role.
3. Products and Accessories - Microbiology
   - The preparation portfolio establishes offered mechanical and fluidic supporting-equipment roles, distinct from the listed reading equipment.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
4. Product Inspection Systems - METTLER TOLEDO
   - X-ray equipment is offered for contamination detection; vision equipment is described for labeling and packaging checks. These establish separate offered purposes rather than platform equivalence.
5. EnSURE Touch ATP Luminometer for Hygiene Monitoring
   - EnSURE Touch is described as an ATP bioluminescence hygiene-monitoring instrument, illustrating a defined portion of the broader platform category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
6. GENE-UP - bioMérieux
   - bioMérieux markets GENE-UP as a real-time PCR solution for foodborne-hazard detection and presents associated applications, test kits, and instrument-support services.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
7. Multi-Vendor Services - Agilent
   - Agilent offers repair, maintenance, and compliance support for non-Agilent chromatography and mass spectrometry instruments, qualifying universal manufacturer-service exclusivity.

8. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
   - Neogen's June xx.xx 2024 announcement reports a USDA FSIS contract for its Molecular Detection System and identifies the platform as LAMP-based. This is a company-reported institutional relationship, not a universal adoption claim.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
9. Testing laboratories - R-Biopharm Food & Feed Analysis
   - R-Biopharm lists RIDA CUBE SCAN as a photometric system for enzymatic and colorimetric food-component analysis, including sulfite. Its portfolio spans safety and composition applications.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
10. ISO 19036:2019 - Microbiology of the food chain - Estimation of measurement uncertainty for quantitative determinations
    - ISO xx.xx's public scope recognizes colony-count approaches, ATP measurement, flow cytometry, and qPCR within food-chain quantitative microbiology; recognition does not establish identical commercial purposes.
    - Taxonomy evidence: The scope distinguishes colony-count/MPN, impediometry, ATP, flow cytometry, and qPCR approaches in food-chain analysis, without defining an exhaustive equipment market. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))
11. FoodScreen - Radiological Food Screening System
    - Mirion markets FoodScreen specifically for radiological food screening, supporting a commercial purpose distinct from physical-contaminant X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
12. ISO 7218:2024 - Microbiology of the food chain - General requirements and guidance for microbiological examinations, public preview
    - The public ISO xx.xx:2024 preview separately identifies incubators in its food-chain microbiology equipment headings. No operational guidance is used.

13. Review of allergen analytical testing methodologies: measurement parameters and sensitivity of methods
    - The FSA-commissioned review identifies variation between commercial allergen systems and gaps in publicly comparable application information.
    - Taxonomy evidence: Different analytical platforms are treated as distinct hardware investments. Their differing costs do not establish comparable market-wide price/quality tiers. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
    - Taxonomy evidence: The FSA-commissioned review distinguishes ELISA, PCR, and LC-MS food-allergen technologies and separates associated hardware from consumables and testing fees. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
14. HACCP Principles & Application Guidelines
    - FDA's HACCP guidance identifies pH, temperature, time, and moisture measurements as monitoring activities, supporting electrochemical and physical measurement roles.
15. Processing & Marketing - Food and Beverage Manufacturing
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

16. Mettler-Toledo International Inc. - 2025 Form 10-K
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
17. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
    - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
    - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.

18. Agilent Technologies - 2017 Annual Report
- Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

19. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
- Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
- Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
- Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

20. Agilent Technologies - Fiscal 2025 Annual Report
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.

21. Agilent Technologies - Q1 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

22. Waters Corporation - 2025 Annual Report
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.

23. Thermo Fisher Scientific Inc. - 2025 Form 10-K
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

24. bioMérieux - 2025 Financial Results
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.

25. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
26. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
27. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
28. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
29. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

30. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
31. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
32. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

33. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
34. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.

8.1. Mass Spectrometry

Table 26. Global Food Safety Testing Equipment Market Size, by Mass Spectrometry, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 27. Global Food Safety Testing Equipment Market Size, by Mass Spectrometry, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 28. Global Food Safety Testing Equipment Market Size, by Mass Spectrometry, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

RESEARCH SAMPLE REPORT

Sources & Evidence

1. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods - Food Standards Agency
   - Taxonomy evidence: LC-MS equipment is identified as a separate hardware investment; this supports platform recognition, not a global revenue allocation. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
   - Taxonomy evidence: Identifies LC-MS hardware as distinct from immunoassay-reader and PCR equipment. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
2. Standard Specifications for Setting Up of a Basic Functional Food Analysis Laboratory
   - Taxonomy evidence: Includes inductively coupled plasma mass-spectrometric equipment. ([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))
3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

8.2. X-Ray Imaging

Table 29. Global Food Safety Testing Equipment Market Size, by X-Ray Imaging, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 30. Global Food Safety Testing Equipment Market Size, by X-Ray Imaging, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 31. Global Food Safety Testing Equipment Market Size, by X-Ray Imaging, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. BRCGS Global Standard Food Safety, Issue 9

   · Taxonomy evidence: Explicitly identifies X-ray inspection equipment as a food foreign-body detection category.
   ([nifcc.co.uk](https://www.nifcc.co.uk/site/wp-content/uploads/2023/xx.xx/BRCGS_Food_Safety_Standard_Issue_9.pdf))

2. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
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    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
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    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.

8.3. Physical Property Metrology

Table 32. Global Food Safety Testing Equipment Market Size, by Physical Property Metrology, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 33. Global Food Safety Testing Equipment Market Size, by Physical Property Metrology, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 34. Global Food Safety Testing Equipment Market Size, by Physical Property Metrology, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Standard Specifications for Setting Up of a Basic Functional Food Analysis Laboratory
   · Taxonomy evidence: Lists analytical balances, thermohygrometers, and water-activity meters. ([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))
2. ISO 7218:2024 - Microbiology of the Food Chain - General Requirements and Guidance for Microbiological Examinations, Public Preview
   · Taxonomy evidence: Distinguishes temperature-monitoring devices and balances/gravimetric diluters in its equipment headings. ([webstore.ansi.org](https://webstore.ansi.org/preview-pages/iso/preview_iso%252B7218-2024.pdf))
3. HACCP Principles & Application Guidelines
   · Taxonomy evidence: Identifies physical measurements, including temperature, time, and moisture, as food-safety monitoring activities. ([fda.gov](https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines))
4. Water Activity (aw) in Foods
   · Taxonomy evidence: The historical equipment discussion identifies hygrometric instruments for assessing food water activity; it does not establish current models or installations. ([fda.gov](https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/inspection-technical-guides/water-activity-aw-foods))

5. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
6. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

7. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

8. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
9. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
10. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

11. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
12. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

13. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
14. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
15. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
16. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
17. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
18. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

19. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
20. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
21. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
22. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
23. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
24. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

25. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
26. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
27. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
28. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
29. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
30. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

31. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
32. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
33. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
34. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
35. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
36. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.

8.4. Metal Detection

Table 35. Global Food Safety Testing Equipment Market Size, by Metal Detection, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 36. Global Food Safety Testing Equipment Market Size, by Metal Detection, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 37. Global Food Safety Testing Equipment Market Size, by Metal Detection, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. BRCGS Global Standard Food Safety, Issue 9

   · Taxonomy evidence: Identifies metal detectors separately from X-ray equipment and passive magnets. ([nifcc.co.uk](https://www.nifcc.co.uk/site/wp-content/uploads/2023/xx.xx/BRCGS_Food_Safety_Standard_Issue_9.pdf))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

8.5. Mechanical & Fluidic Sample Handling

Table 38. Global Food Safety Testing Equipment Market Size, by Mechanical & Fluidic Sample Handling, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 39. Global Food Safety Testing Equipment Market Size, by Mechanical & Fluidic Sample Handling, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 40. Global Food Safety Testing Equipment Market Size, by Mechanical & Fluidic Sample Handling, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. ISO 7218:2024 - Microbiology of the Food Chain - General Requirements and Guidance for Microbiological Examinations, Public Preview

   · Taxonomy evidence: Its equipment classification recognizes mechanical homogenization, dispensing, centrifugal separation, and filtration hardware. ([webstore.ansi.org](https://webstore.ansi.org/preview-pages/iso/preview_iso%252B7218-2024.pdf))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
34. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.

8.6. Chromatography & Electrophoresis

Table 41. Global Food Safety Testing Equipment Market Size, by Chromatography & Electrophoresis, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 42. Global Food Safety Testing Equipment Market Size, by Chromatography & Electrophoresis, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 43. Global Food Safety Testing Equipment Market Size, by Chromatography & Electrophoresis, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Technical Specifications for Equipment Used in Chemical Analysis of Food - FSSAI
   - Taxonomy evidence: Its contents separately name chromatographs and agarose and vertical electrophoresis systems. Electrophoresis appears among auxiliary equipment, so safety-specific purchasing and purchased function are not established.
   ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/Notice_Comments_Chemical_Analysis_Food_21_10_2020_.pdf))
2. Standard Specifications for Setting Up of a Basic Functional Food Analysis Laboratory
   - Taxonomy evidence: Names gas, high-performance liquid, and ion chromatographs; it does not establish the electrophoresis portion.
   ([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))

3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
34. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.

8.7. Thermal Sample Conditioning

Table 44. Global Food Safety Testing Equipment Market Size, by Thermal Sample Conditioning, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 45. Global Food Safety Testing Equipment Market Size, by Thermal Sample Conditioning, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 46. Global Food Safety Testing Equipment Market Size, by Thermal Sample Conditioning, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. ISO 7218:2024 - Microbiology of the Food Chain - General Requirements and Guidance for Microbiological Examinations, Public Preview

   · Taxonomy evidence: Recognizes incubators, controlled baths, and heating blocks as temperature-controlled equipment categories. ([webstore.ansi.org](https://webstore.ansi.org/preview-pages/iso/preview_iso%252B7218-2024.pdf))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.

8.8. Optical Imaging & Machine Vision

Table 47. Global Food Safety Testing Equipment Market Size, by Optical Imaging & Machine Vision, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 48. Global Food Safety Testing Equipment Market Size, by Optical Imaging & Machine Vision, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 49. Global Food Safety Testing Equipment Market Size, by Optical Imaging & Machine Vision, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. BRCGS Global Standard Food Safety, Issue 9

   · Taxonomy evidence: Recognizes optical sorting equipment for final-product testing; only identifiable in-scope sensing/inspection hardware is allocated here, not an entire processing installation. ([nifcc.co.uk](https://www.nifcc.co.uk/site/wp-content/uploads/2023/xx.xx/BRCGS_Food_Safety_Standard_Issue_9.pdf))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

8.9. Nucleic Acid Amplification & Sequencing

Table 50. Global Food Safety Testing Equipment Market, by Nucleic Acid Amplification & Sequencing growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 51. Global Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 52. Global Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 53. Global Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. ISO 24914:2026 - Microbiology of the Food Chain - Loop-Mediated Isothermal Amplification (LAMP) for the Detection of Microorganisms and Associated Genetic Markers - General Requirements and Definitions
   · Taxonomy evidence: The public scope distinguishes LAMP from PCR and supports retention of a separately named isothermal branch within the molecular-platform parent. ([iso.org](https://www.iso.org/standard/xx.xx.html))
2. ISO 22174:2024 - Microbiology of the Food Chain - Polymerase Chain Reaction (PCR) for the Detection and Quantification of Microorganisms - General Requirements and Definitions
   · Taxonomy evidence: Provides independent food-chain recognition for the PCR amplification portion of the molecular-platform parent. ([iso.org](https://www.iso.org/standard/xx.xx.html))
3. ISO 24914 - Microbiology of the Food Chain - Loop-Mediated Isothermal Amplification (LAMP) for the Detection of Microorganisms - Public Scope
   · Taxonomy evidence: Supports inclusion of a separately named isothermal-amplification branch within the molecular-platform parent, without establishing current product sales or authorization. ([iso.org](https://www.iso.org/obp/ui?_escaped_fragment_=iso%3Astd%3Aiso%3A24914%3Aed-xx.xx%3Av1%3Aen))

4. TechTalk Podcast Episode 2: Whole Genome Sequencing in the New Era of Smarter Food Safety
   - Taxonomy evidence: Supports sequencing as a distinct analytical-platform branch alongside amplification within the molecular parent. ([fda.gov](https://www.fda.gov/food/new-era-smarter-food-safety-techtalk-podcast/techtalk-podcast-episode-xx.xx-whole-genome-sequencing-new-era-smarter-food-safety))
5. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
6. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.

7. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

8. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
9. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
10. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

11. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
12. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

13. Waters Corporation - 2025 Annual Report
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.

14. Thermo Fisher Scientific Inc. - 2025 Form 10-K
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

15. bioMérieux - 2025 Financial Results
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.

16. Neogen Corporation - Fiscal 2025 Annual Report
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

17. Testo - Annual Press Conference, January 23, 2025
- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.

18. Anritsu Integrated Report 2025
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

19. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
20. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
21. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
22. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
23. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
24. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

25. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
26. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
27. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
28. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
29. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
30. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

31. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
32. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
33. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
34. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
35. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
36. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.

37. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
38. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
39. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

8.9.1. PCR Platforms

Table 54. Global Food Safety Testing Equipment Market Size, by PCR Platforms, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 55. Global Food Safety Testing Equipment Market Size, by PCR Platforms, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 56. Global Food Safety Testing Equipment Market Size, by PCR Platforms, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods - Food Standards Agency

· Taxonomy evidence: The commercial comparison identifies PCR instrumentation independently of plate-reader and LC-MS hardware. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))

· Taxonomy evidence: The food-allergen hardware comparison includes real-time PCR instruments. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))

· Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.

· Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.

2. ISO 22174:2024 - Microbiology of the Food Chain - Polymerase Chain Reaction (PCR) for the Detection and Quantification of Microorganisms - General Requirements and Definitions
   - Taxonomy evidence: Public scope establishes PCR as a named food-chain analytical platform applicable to human food and food-production environmental samples. ([iso.org](https://www.iso.org/standard/xx.xx.html))
3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
34. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

8.9.2. Isothermal Amplification Platforms

Table 57. Global Food Safety Testing Equipment Market Size, by Isothermal Amplification Platforms, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 58. Global Food Safety Testing Equipment Market Size, by Isothermal Amplification Platforms, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 59. Global Food Safety Testing Equipment Market Size, by Isothermal Amplification Platforms, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. ISO 24914:2026 - Microbiology of the Food Chain - Loop-Mediated Isothermal Amplification (LAMP) for the Detection of Microorganisms and Associated Genetic Markers - General Requirements and Definitions

   · Taxonomy evidence: ISO xx.xx:2026 was published on January xx.xx 2026 and recognizes LAMP platforms in food-chain analysis, including human-food and food-production environmental contexts. This establishes current category recognition, not 2025 sales. ([iso.org](https://www.iso.org/standard/xx.xx.html))

2. Rapid In-Field Diagnostics: Horizon Scanning and Technology Readiness Level Study With a Technology Pilot Study - FSA Research and Evidence

   · Taxonomy evidence: The study recognizes instrument-based LAMP platforms in food-safety applications, adding independent deployment context without establishing routine global adoption. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx-rapid-in-field-diagnostics-horizon-scanning-and-technology-readiness-level-study-with-a-technology-pilot-study))

3. ISO 24914 - Microbiology of the Food Chain - Loop-Mediated Isothermal Amplification (LAMP) for the Detection of Microorganisms - Public Scope

   · Taxonomy evidence: The public scope recognizes LAMP as a food-chain detection platform and distinguishes its general requirements from those for PCR. No operating guidance is reproduced. ([iso.org](https://www.iso.org/obp/ui?_escaped_fragment_=iso%3Astd%3Aiso%3A24914%3Aed-xx.xx%3Av1%3Aen))

4. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
5. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

6. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

7. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
8. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
9. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

10. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
11. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

12. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
13. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
14. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
15. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
16. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
17. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

18. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
19. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
20. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
21. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
22. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
23. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

24. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
25. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
26. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
27. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
28. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
29. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

30. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
31. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
32. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
33. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
34. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
35. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.

8.9.3. DNA Sequencing Platforms

Table 60. Global Food Safety Testing Equipment Market Size, by DNA Sequencing Platforms, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 61. Global Food Safety Testing Equipment Market Size, by DNA Sequencing Platforms, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 62. Global Food Safety Testing Equipment Market Size, by DNA Sequencing Platforms, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. TechTalk Podcast Episode 2: Whole Genome Sequencing in the New Era of Smarter Food Safety
   - Taxonomy evidence: Describes whole-genome sequencing in food-safety surveillance and facility investigations, establishing a food-safety use category rather than universal industry adoption. ([fda.gov](https://www.fda.gov/food/new-era-smarter-food-safety-techtalk-podcast/techtalk-podcast-episode-xx.xx-whole-genome-sequencing-new-era-smarter-food-safety))
2. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
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15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

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    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
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18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.

8.10. Electrochemical Analysis

Table 63. Global Food Safety Testing Equipment Market Size, by Electrochemical Analysis, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 64. Global Food Safety Testing Equipment Market Size, by Electrochemical Analysis, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 65. Global Food Safety Testing Equipment Market Size, by Electrochemical Analysis, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Standard Specifications for Setting Up of a Basic Functional Food Analysis Laboratory
   - Taxonomy evidence: Lists pH, conductivity/TDS, and Karl Fischer coulometric instruments. ([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))
2. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.

8.11. Spectroscopy & Photometry

Table 66. Global Food Safety Testing Equipment Market Size, by Spectroscopy & Photometry, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 67. Global Food Safety Testing Equipment Market Size, by Spectroscopy & Photometry, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 68. Global Food Safety Testing Equipment Market Size, by Spectroscopy & Photometry, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Standard Specifications for Setting Up of a Basic Functional Food Analysis Laboratory

   · Taxonomy evidence: Names atomic-absorption, FT-IR, fluorescence, and UV-visible instruments. ([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.

8.12. Culture-Based Microbiology

Table 69. Global Food Safety Testing Equipment Market Size, by Culture-Based Microbiology, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 70. Global Food Safety Testing Equipment Market Size, by Culture-Based Microbiology, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 71. Global Food Safety Testing Equipment Market Size, by Culture-Based Microbiology, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. ISO 19036:2019 - Microbiology of the Food Chain - Estimation of Measurement Uncertainty for Quantitative Determinations

   · Taxonomy evidence: The current public scope separately recognizes colony-count and MPN approaches within food-chain quantitative microbiology, supporting the culture-based category without defining equipment sales. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))

   · Taxonomy evidence: Recognizes colony-count and MPN approaches, supporting a separate culture-based enumeration family. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))

2. Standard Specifications for Setting Up of a Basic Functional Food Analysis Laboratory

   · Taxonomy evidence: Includes digital colony-counting equipment within its microbiology instrument list. ([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Standard_Spec_Equipment_Food_23_07_2021.pdf))

3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
34. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.

8.13. Affinity & Biochemical Assay Platforms

Table 72. Global Food Safety Testing Equipment Market Size, by Affinity & Biochemical Assay Platforms, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 73. Global Food Safety Testing Equipment Market Size, by Affinity & Biochemical Assay Platforms, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 74. Global Food Safety Testing Equipment Market Size, by Affinity & Biochemical Assay Platforms, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Technical Specifications for Equipment Used in Chemical Analysis of Food - FSSAI

   · Taxonomy evidence: An ELISA-reader heading supports the immunoassay-reader subset, not the entire non-immunological biochemical family. ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/Notice_Comments_Chemical_Analysis_Food_21_10_2020_.pdf))

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods - Food Standards Agency
   - Taxonomy evidence: Documents ELISA and lateral-flow food-allergen testing, with plate-reader hardware identified for ELISA. This does not establish the non-immunological biochemical portion. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.

8.14. Bioluminescence & Chemiluminescence

Table 75. Global Food Safety Testing Equipment Market Size, by Bioluminescence & Chemiluminescence, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 76. Global Food Safety Testing Equipment Market Size, by Bioluminescence & Chemiluminescence, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 77. Global Food Safety Testing Equipment Market Size, by Bioluminescence & Chemiluminescence, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Rapid In-Field Diagnostics: Horizon Scanning and Technology Readiness Level Study With a Technology Pilot Study - FSA Research and Evidence

   · Taxonomy evidence: The publication identifies food-industry ATP luminometers and luminometer readout associated with chemiluminescence products; it does not isolate equipment-sale consideration. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx-rapid-in-field-diagnostics-horizon-scanning-and-technology-readiness-level-study-with-a-technology-pilot-study))

2. ISO 19036:2019 - Microbiology of the Food Chain - Estimation of Measurement Uncertainty for Quantitative Determinations

   · Taxonomy evidence: ATP measurement remains recognized in the public food-chain scope; this supports the ATP-linked subset rather than every chemiluminescence platform. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))

   · Taxonomy evidence: Explicitly recognizes ATP measurement in food-chain analysis. This supports the ATP-linked portion, not every chemiluminescence platform. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))

3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.

18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
- Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.

21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.

22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
34. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.

8.15. Flow Cytometry

Table 78. Global Food Safety Testing Equipment Market Size, by Flow Cytometry, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 79. Global Food Safety Testing Equipment Market Size, by Flow Cytometry, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 80. Global Food Safety Testing Equipment Market Size, by Flow Cytometry, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. ISO 19036:2019 - Microbiology of the Food Chain - Estimation of Measurement Uncertainty for Quantitative Determinations

   · Taxonomy evidence: Flow cytometry is explicitly recognized as a food-chain instrumental approach, supporting category recognition but not food-safety-attributable purchasing volumes. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))

   · Taxonomy evidence: Explicitly recognizes flow cytometry among food-chain microbiology instrumental approaches. ([iso.org](https://www.iso.org/standard/xx.xx.html?browse=tc))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
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   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
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   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
34. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.

8.16. Radiometric Analysis

Table 81. Global Food Safety Testing Equipment Market Size, by Radiometric Analysis, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 82. Global Food Safety Testing Equipment Market Size, by Radiometric Analysis, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 83. Global Food Safety Testing Equipment Market Size, by Radiometric Analysis, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Total Diet Study Report: Fiscal Years 2018-2020 Radionuclides Data

   · Taxonomy evidence: Reports food-sample analysis using high-purity germanium gamma spectrometry and gas-flow proportional counting, supporting radiometric analysis rather than irradiation-processing equipment. ([fda.gov](https://www.fda.gov/media/xx.xx/download))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.

9. Food Safety Testing Equipment Market, by Testing Objective

[illegible] An environmental location therefore does not make these objectives equivalent. A quality team should retain the distinction when specifying equipment and records, rather than substitute a cleanliness record for a separately required hazard-specific result without acceptance by the relevant customer or authority.

Food Allergen Testing and Chemical Contaminant and Residue Testing also create different application boundaries. FDA connects allergen controls with cross-contact prevention and accurate labeling, while its chemical-contaminant framework covers environmental contaminants, process contaminants, natural toxins, and pesticide residues. [illegible]

Radiological Contamination Testing and Physical Contaminant Inspection should be qualified against different purchasing triggers. The Food Standards Agency's 2026/xx.xx plan includes statutory radioactivity monitoring and reporting, establishing a specialist institutional requirement rather than a general equipment mandate for manufacturers. [illegible]

[illegible] Buyers should specify which records the equipment must deliver and who is responsible for reviewing exceptions. This purchasing route complements required testing and inspection; it should not be presented as discharging every other safety objective or as requiring new equipment when suitable assets already exist.

Figure 12. Global Food Safety Testing Equipment Market Size, by Testing Objective, 2025 (%)

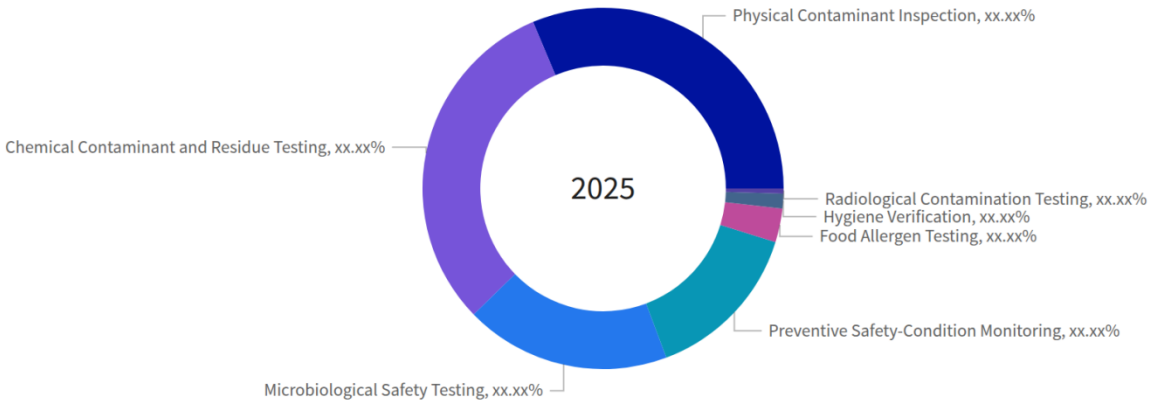

Figure 13. Global Food Safety Testing Equipment Market, by Testing Objective, 2032 (USD Million)

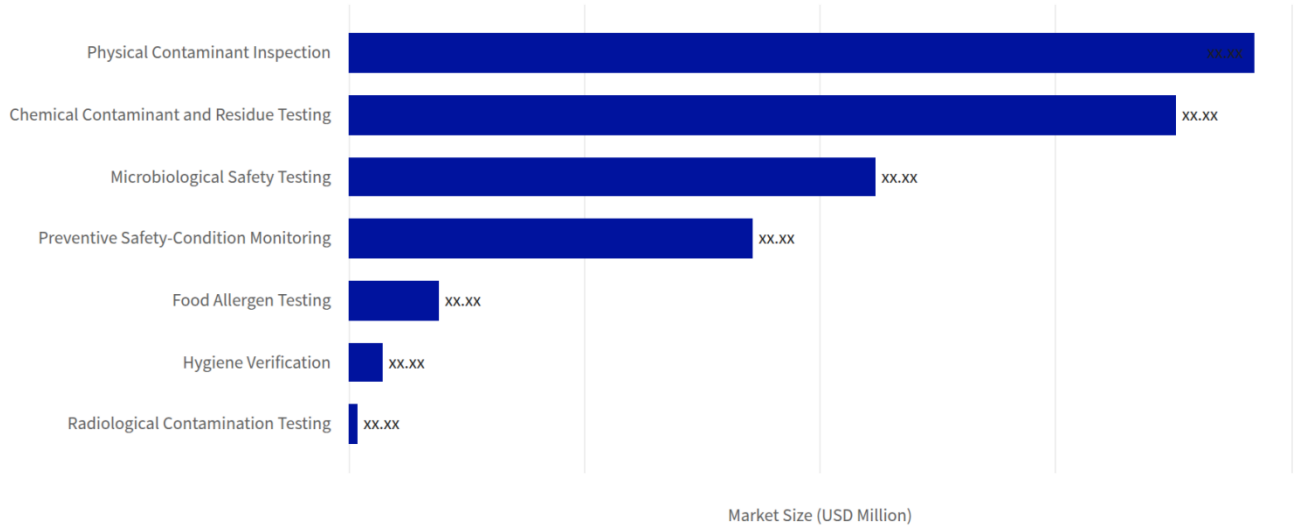

Table 84. Global Food Safety Testing Equipment Market, by Testing Objective growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 85. Global Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. FSMA Final Rule for Preventive Controls for Human Food
   - FDA distinguishes documented monitoring from verification activities, including applicable product testing and environmental monitoring.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
2. FSA 2026/27 Annual Plan and Budget
   - The FSA 2026/xx.xx plan includes statutory monitoring and reporting on radioactivity in the food environment. It establishes a planned institutional duty, not a particular equipment award.
3. EnSURE Touch ATP Luminometer for Hygiene Monitoring
   - Hygiena markets EnSURE Touch for cleaning verification; this offering description is not proof of equivalence with separately required hazard-specific evidence.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
4. Cabinet X-Ray Systems (Closed X-Ray Systems) - FDA
   - FDA identifies food inspection for foreign objects as a cabinet X-ray application.
5. Review of allergen analytical testing methodologies: measurement parameters and sensitivity of methods
   - The review reports differing outputs for the same allergen and limitations in cross-system comparability, supporting application-specific equipment and reporting assessment.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from lower-cost readers; it is not a chemical-objective revenue disclosure.
6. Environmental Sampling - FDA
   - FDA describes environmental sampling during inspections as directed at harmful microbial hazards, establishing that environmental location alone does not define a nonspecific hygiene objective.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
7. Food Allergies - FDA
   - FDA connects allergen preventive controls with preventing cross-contact and undeclared allergens, including manufacturing, packaging, and labeling responsibilities.
8. Chemical Contaminants & Pesticides - FDA
   - FDA identifies environmental contaminants, process contaminants, natural toxins, and pesticide residues and describes manufacturers' chemical-hazard prevention responsibilities.

9. HACCP Principles & Application Guidelines

· The guidance distinguishes monitoring control conditions from other safety activities. The equipment-purchasing implication is conditional on the buyer's required records.

· Taxonomy evidence: The guidance distinguishes biological, chemical and physical hazards and addresses monitoring and verification, providing a high-level foundation for an objective-based partition. The proposed taxonomy is an analytical adaptation, not an official FDA segmentation. ([fda.gov](https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines))

10. About METTLER TOLEDO Product Inspection

· METTLER TOLEDO describes physical-contaminant detection and other inspection purposes, establishing a manufacturing inspection proposition distinct from statutory radioactivity monitoring.

11. Laboratory development | FAO

· Taxonomy evidence: FAO distinguishes preventive process controls from sampling and testing used to verify food-safety controls, supporting separation of direct testing and verification objectives without treating them as identical activities. ([fao.org](https://www.fao.org/food-safety/food-control-systems/laboratory-development/en))

12. Processing & Marketing - Food and Beverage Manufacturing

· Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

13. Mettler-Toledo International Inc. - 2025 Form 10-K

· Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.

· Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.

· Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.

14. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
    - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
    - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
15. Agilent Technologies - 2017 Annual Report
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
16. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

17. Agilent Technologies - Fiscal 2025 Annual Report
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.

18. Agilent Technologies - Q1 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

19. Waters Corporation - 2025 Annual Report
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.

20. Thermo Fisher Scientific Inc. - 2025 Form 10-K
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

21. bioMérieux - 2025 Financial Results
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.

22. Neogen Corporation - Fiscal 2025 Annual Report
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

23. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
24. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
25. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
26. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
27. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

28. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.
29. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
30. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
31. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.

9.1. Physical Contaminant Inspection

Table 86. Global Food Safety Testing Equipment Market Size, by Physical Contaminant Inspection, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 87. Global Food Safety Testing Equipment Market Size, by Physical Contaminant Inspection, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 88. Global Food Safety Testing Equipment Market Size, by Physical Contaminant Inspection, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. HACCP Principles & Application Guidelines

   · Taxonomy evidence: Physical hazards include foreign materials such as stones, glass and metal, and the guidance identifies metal detectors among product-safety devices. This supports foreign-body inspection as a distinct safety purpose. ([fda.gov](https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

9.2. Chemical Contaminant and Residue Testing

Table 89. Global Food Safety Testing Equipment Market Size, by Chemical Contaminant and Residue Testing, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 90. Global Food Safety Testing Equipment Market Size, by Chemical Contaminant and Residue Testing, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 91. Global Food Safety Testing Equipment Market Size, by Chemical Contaminant and Residue Testing, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Legislation - Food-Contact Materials - European Commission

   · Taxonomy evidence: Food-contact chemical migration is a recognized safety-compliance subject, supporting its inclusion within chemical-safety testing rather than packaging-production activity. ([food.ec.europa.eu](https://food.ec.europa.eu/food-safety/chemical-safety/food-contact-materials/legislation_en))

2. HACCP Principles & Application Guidelines

   · Taxonomy evidence: Its chemical-hazard examples include aflatoxin and antibiotic or pesticide residues, supporting classification of toxin and residue measurement by the chemical target rather than its origin. ([fda.gov](https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines))

3. Chemical Contaminants & Pesticides | FDA

   · Taxonomy evidence: FDA describes food testing for chemical contaminants and pesticide residues and distinguishes environmental contaminants, process contaminants and natural toxins. Its environmental examples include toxic elements and industrial chemicals; radionuclides are also listed administratively but are separated in the proposed taxonomy.
   ([fda.gov](https://www.fda.gov/food/chemical-contaminants-pesticides))

4. Legislation - Food Safety - European Commission

   · Taxonomy evidence: The Commission identifies chemical migration testing as part of food-contact-material safety compliance, establishing an application connected to human-food chemical safety rather than packaging production.
   ([food.ec.europa.eu](https://food.ec.europa.eu/food-safety/chemical-safety/food-contact-materials/legislation_en?prefLang=es))

5. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

6. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from lower-cost readers; it is not a chemical-objective revenue disclosure.

7. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

8. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
9. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
10. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

11. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
12. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

13. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
14. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
15. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
16. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
17. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
18. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

19. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
20. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
21. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
22. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
23. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
24. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

25. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
26. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
27. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
28. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
29. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
30. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

31. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
32. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
33. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
34. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
35. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
36. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.

9.3. Microbiological Safety Testing

Table 92. Global Food Safety Testing Equipment Market Size, by Microbiological Safety Testing, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 93. Global Food Safety Testing Equipment Market Size, by Microbiological Safety Testing, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 94. Global Food Safety Testing Equipment Market Size, by Microbiological Safety Testing, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Environmental Sampling - FDA

   · Taxonomy evidence: Environmental samples may be assessed for named microbial hazards. Their environmental location does not make the testing objective nonspecific hygiene verification. ([fda.gov](https://www.fda.gov/food/sampling-protect-food-supply/environmental-sampling))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.

2. Compendium of Microbiological Criteria for Food | Food Standards Australia New Zealand

   · Taxonomy evidence: The compendium recognizes pathogens and indicator organisms as food-safety testing targets and covers food-production environmental monitoring. ([foodstandards.gov.au](https://www.foodstandards.gov.au/sites/default/files/publications/Documents/Compendium_revised%20Dec%xx.xx.pdf))

3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
34. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.

9.4. Preventive Safety-Condition Monitoring

Table 95. Global Food Safety Testing Equipment Market Size, by Preventive Safety-Condition Monitoring, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 96. Global Food Safety Testing Equipment Market Size, by Preventive Safety-Condition Monitoring, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 97. Global Food Safety Testing Equipment Market Size, by Preventive Safety-Condition Monitoring, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. HACCP Principles & Application Guidelines

   · Taxonomy evidence: The guidance recognizes monitoring of time, temperature, pH and moisture, and identifies water activity as a safety-relevant intrinsic food characteristic. These are control-condition measurements rather than direct hazard assays. ([fda.gov](https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines))

2. 2022 FDA Food Code - Print Version

   · Taxonomy evidence: Food-temperature measuring devices are recognized as monitoring equipment for food-safety conditions. Only separately attributable in-scope hardware qualifies under the working equipment boundary. ([fda.gov](https://www.fda.gov/media/xx.xx/download))

3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.

16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
34. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.

9.5. Food Allergen Testing

Table 98. Global Food Safety Testing Equipment Market Size, by Food Allergen Testing, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 99. Global Food Safety Testing Equipment Market Size, by Food Allergen Testing, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 100. Global Food Safety Testing Equipment Market Size, by Food Allergen Testing, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Food Allergies | FDA

   · Taxonomy evidence: FDA treats undeclared allergens and allergen cross-contact as food-safety concerns and describes food-allergen testing using several analytical platforms. This supports a distinct allergen objective independent of technology.
   ([fda.gov](https://www.fda.gov/food/nutrition-food-labeling-and-critical-foods/food-allergies))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.

29. Brazil Ministry of Agriculture - Accredited Laboratories
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.

30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.

31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.

32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

33. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

9.6. Hygiene Verification

Table 101. Global Food Safety Testing Equipment Market Size, by Hygiene Verification, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 102. Global Food Safety Testing Equipment Market Size, by Hygiene Verification, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 103. Global Food Safety Testing Equipment Market Size, by Hygiene Verification, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Rapid In-Field Diagnostics: Horizon Scanning and Technology Readiness Level Study With a Technology Pilot Study - FSA Research and Evidence

   · Taxonomy evidence: It distinguishes nonspecific ATP cleanliness measurements from identification of a particular microorganism, supporting the objective boundary without treating all hygiene-related tests as equivalent.
   ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx-rapid-in-field-diagnostics-horizon-scanning-and-technology-readiness-level-study-with-a-technology-pilot-study))

2. Compendium of Microbiological Criteria for Food | Food Standards Australia New Zealand

   · Taxonomy evidence: It distinguishes rapid ATP and protein cleanliness checks from tests determining whether target microorganisms are present.
   ([foodstandards.gov.au](https://www.foodstandards.gov.au/sites/default/files/publications/Documents/Compendium_revised%20Dec%xx.xx.pdf))

3. 2022 FDA Food Code - Print Version

   · Taxonomy evidence: The model recognizes devices for checking sanitation conditions. This supports the verification objective, not inclusion of disposable test supplies or cleaning machinery.
   ([fda.gov](https://www.fda.gov/media/xx.xx/download))

4. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
5. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

6. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

7. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
8. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
9. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

10. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
11. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

12. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
13. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
14. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
15. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
16. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
17. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

18. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
19. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
20. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
21. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
22. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
23. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

24. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
25. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
26. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
27. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
28. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
29. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

30. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
31. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
32. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
33. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
34. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
35. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
36. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.

9.7. Radiological Contamination Testing

Table 104. Global Food Safety Testing Equipment Market Size, by Radiological Contamination Testing, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 105. Global Food Safety Testing Equipment Market Size, by Radiological Contamination Testing, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 106. Global Food Safety Testing Equipment Market Size, by Radiological Contamination Testing, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. FDA Response to the Fukushima Daiichi Nuclear Power Facility Incident | FDA

   · Taxonomy evidence: FDA describes routine radionuclide surveillance, laboratory measurement of radioactive contamination in food and public food-testing network capabilities. It also identifies radiation-detection equipment used for food-import screening. These establish the testing category, not equipment-market revenue.
   ([fda.gov](https://www.fda.gov/news-events/public-health-focus/fda-response-fukushima-daiichi-nuclear-power-facility-incident))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
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    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
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13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
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15. Anritsu Integrated Report 2025
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18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
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19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.

10. Food Safety Testing Equipment Market, by End User

End User changes both the equipment-use rationale and the organization controlling acquisition. ▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ Suppliers should establish the actual fulfillment arrangement and acquisition authority in each setting.

Food-Contact Material Manufacturers face a documentation-centered choice. ▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪ Singapore's documented use of recognized private laboratories provides a concrete external-fulfillment alternative for food businesses, while leaving equipment acquisition with the laboratory operator.

Food Distribution and Logistics Businesses require particularly careful identification of the responsible buyer. ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ Contracted access to usable records can matter as much as possession of the device.

Food Retailers and Foodservice Operators have premises-level monitoring needs distinct from specialist laboratory acquisition. ▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪ ▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ Buyers should first establish the applicable local rules and the responsibilities of site staff and central management; a common corporate platform does not independently settle each site's obligations.

Government Food-Control Organizations and Academic and Research Institutions have separate institutional commitment gates. AFBI's December 2025 LC-MS tender specifies installation and continuing support, while an additional acquisition depends on funding and

budget approval. ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪

Figure 14. Global Food Safety Testing Equipment Market Size, by End User, 2025 (%)

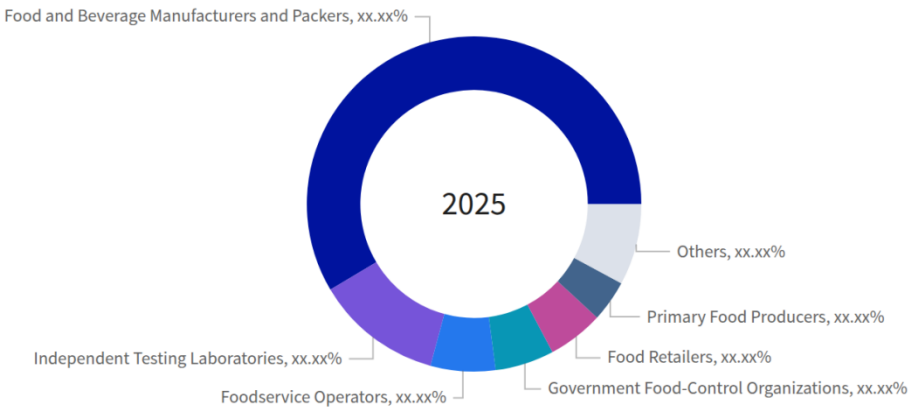

Figure 15. Global Food Safety Testing Equipment Market, by End User, 2032 (USD Million)

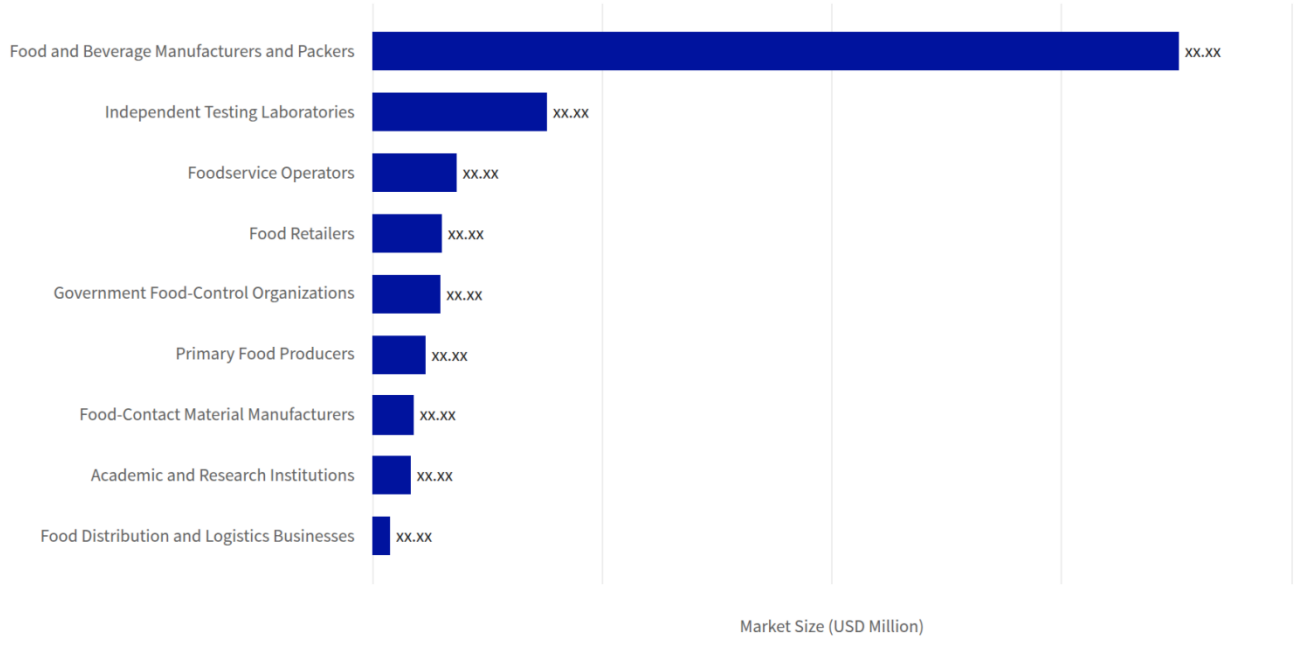

Table 107. Global Food Safety Testing Equipment Market, by End User growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 108. Global Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. FSMA Final Rule for Preventive Controls for Human Food
   - Covered facilities must implement food-safety plans; testing and monitoring requirements depend on the food, facility, and applicable preventive control rather than a universal instrument purchase.
2. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
   - LAAF connects specified food-testing relationships to accredited laboratories, applicable analyte scope, and compliance dates. Owners' and consignees' laboratory-use obligations are distinct from equipment ownership.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
3. Ramping Up Singapore's Food Testing Capabilities
   - SFA's January xx.xx 2023 account describes recognized private laboratories serving food-industry needs and progressive outsourcing of specified testing services, establishing an observed external-fulfillment route.
4. Legislation - Food Contact Materials
   - The European Commission links plastic food-contact declarations of compliance to supporting safety documentation and manufacturer responsibility. The page does not prescribe internal equipment ownership.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.

5. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
   - AFBI's December xx.xx 2025 tender specifies installation and support; an additional acquisition is conditional on further funding and budgetary approval.
6. FSMA Final Rule on Pre-Harvest Agricultural Water
   - FDA's revised provisions replace specified pre-harvest agricultural-water criteria and testing requirements with systems-based assessments for covered produce other than sprouts. The rule alone does not establish an equipment acquisition.
   - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
   - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
7. FDA Food Code
   - FDA identifies grocery stores, restaurants, and institutional foodservice within the Food Code's scope and explains that jurisdictions use it as a model for their own rules.
8. Digital Food Safety Management with testo Saveris Food
   - Restaurants, catering, and distribution centers are identified application settings for the coordinated measurement and documentation offering.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
9. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
   - FDA distinguishes shippers, loaders, carriers, and receivers and addresses agreements, training, and record responsibilities. Those roles do not independently identify the equipment purchaser.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.

10. Equipment Grants Program - NIFA
    - NIFA's Equipment Grants Program supports eligible institutions acquiring shared special-purpose instruments for food and agricultural science research, training, and extension. Program eligibility is not an equipment award.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
11. Food Code 2026 - FDA
    - Taxonomy evidence: FDA's 2026 Food Code identifies retail and foodservice as distinct food-safety operating settings. It is a model offered for jurisdictional adoption, not a uniform global purchasing requirement. ([fda.gov](https://www.fda.gov/food/fda-food-code/food-code-2026))
12. Laboratory development | FAO
    - Taxonomy evidence: FAO describes national authorities, private-sector engagement, laboratory management, universities and research centers within food-control laboratory development. These are operating and institutional roles, not an exhaustive equipment-buyer classification. ([fao.org](https://www.fao.org/food-safety/food-control-systems/laboratory-development/en))
13. Processing & Marketing - Food and Beverage Manufacturing
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.

14. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Public hardware-cost tiers distinguish lower-cost readers from capital-intensive analytical systems; supports asset-weighted captive-laboratory allocation rather than unadjusted counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Public hardware-cost tiers distinguish lower-cost readers from capital-intensive analytical systems; supports asset-weighted captive-laboratory allocation rather than unadjusted counts.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates hardware investment from testing fees and recurring costs; supports the independent-laboratory equipment-only boundary and larger-asset weighting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates hardware investment from testing fees and recurring costs; supports the independent-laboratory equipment-only boundary and larger-asset weighting.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Capital-cost differentiation constrains the ownership-versus-outsourcing model; it does not observe food-contact manufacturers' purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Capital-cost differentiation constrains the ownership-versus-outsourcing model; it does not observe food-contact manufacturers' purchases.
15. Mettler-Toledo International Inc. - 2025 Form 10-K
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.

16. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
    - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
    - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
17. Agilent Technologies - 2017 Annual Report
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
18. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
19. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.

20. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
21. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
22. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
23. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
24. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

25. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
26. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
27. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
28. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

29. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
30. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
31. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
32. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.

33. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.

10.1. Food and Beverage Manufacturers and Packers

Table 109. Global Food Safety Testing Equipment Market Size, by Food and Beverage Manufacturers and Packers, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 110. Global Food Safety Testing Equipment Market Size, by Food and Beverage Manufacturers and Packers, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 111. Global Food Safety Testing Equipment Market Size, by Food and Beverage Manufacturers and Packers, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Compendium of Microbiological Criteria for Food | Food Standards Australia New Zealand
   · Taxonomy evidence: The dairy chapter recognizes in-house laboratories alongside external commercial laboratories, establishing a captive testing setting within food processing. ([foodstandards.gov.au](https://www.foodstandards.gov.au/sites/default/files/publications/Documents/Compendium_revised%20Dec%xx.xx.pdf))
2. Food Allergies | FDA
   · Taxonomy evidence: The page addresses allergen controls during food manufacturing and packaging, establishing these facilities as distinct operating settings for allergen-safety programs without quantifying their equipment purchases. ([fda.gov](https://www.fda.gov/food/nutrition-food-labeling-and-critical-foods/food-allergies))
3. UNSD - Classification Detail: ISIC Rev. 4, Code 10
   · Taxonomy evidence: ISIC Rev. xx.xx Division xx.xx distinguishes transformation of agricultural and fishery products into food from minimal handling classified as wholesale or retail. The proposed human-food boundary excludes the classification's animal-feed activities. ([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Detail/EN/xx.xx/xx.xx))
4. UNSD - Classification Detail: ISIC Rev. 4, Code 11
   · Taxonomy evidence: ISIC Rev. xx.xx Division xx.xx separately recognizes beverage manufacturing, including nonalcoholic beverages and mineral water, supporting inclusion of beverage producers alongside food manufacturers. ([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Detail/EN/xx.xx/xx.xx))

5. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
6. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Public hardware-cost tiers distinguish lower-cost readers from capital-intensive analytical systems; supports asset-weighted captive-laboratory allocation rather than unadjusted counts.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Public hardware-cost tiers distinguish lower-cost readers from capital-intensive analytical systems; supports asset-weighted captive-laboratory allocation rather than unadjusted counts.

7. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

8. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
9. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
10. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

11. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
12. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

13. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
14. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
15. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
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16. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
17. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
18. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

19. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
20. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
21. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
22. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
23. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
24. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

25. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
26. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
27. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
28. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
29. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
30. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

31. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
32. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
33. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
34. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
35. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
36. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
37. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.

10.2. Independent Testing Laboratories

Table 112. Global Food Safety Testing Equipment Market Size, by Independent Testing Laboratories, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 113. Global Food Safety Testing Equipment Market Size, by Independent Testing Laboratories, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 114. Global Food Safety Testing Equipment Market Size, by Independent Testing Laboratories, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods - Food Standards Agency

   · Taxonomy evidence: The cost assessment concerns an established testing-service laboratory, providing an external laboratory acquisition setting without measuring its food-safety-only capital spending. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates hardware investment from testing fees and recurring costs; supports the independent-laboratory equipment-only boundary and larger-asset weighting.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates hardware investment from testing fees and recurring costs; supports the independent-laboratory equipment-only boundary and larger-asset weighting.

2. Compendium of Microbiological Criteria for Food | Food Standards Australia New Zealand

   · Taxonomy evidence: External accredited commercial laboratories are separately recognized as providers of food-industry testing. ([foodstandards.gov.au](https://www.foodstandards.gov.au/sites/default/files/publications/Documents/Compendium_revised%20Dec%xx.xx.pdf))

3. UNSD - Classification Detail: ISIC Rev. 4, Code 7120

   · Taxonomy evidence: ISIC Rev. xx.xx Code xx.xx recognizes technical testing and analysis, including food-hygiene testing. It provides an economic-activity basis for distinguishing external testing businesses from captive food-industry laboratories; it does not measure their equipment spending. ([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Detail/EN/xx.xx/xx.xx))

4. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.

18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
- Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.

21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.

22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.

28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
34. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.

10.3. Foodservice Operators

Table 115. Global Food Safety Testing Equipment Market Size, by Foodservice Operators, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 116. Global Food Safety Testing Equipment Market Size, by Foodservice Operators, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 117. Global Food Safety Testing Equipment Market Size, by Foodservice Operators, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Food Code 2026 - FDA
   · Taxonomy evidence: Foodservice is separately identified in the 2026 model's scope. Current model status does not retroactively establish 2025 requirements or equipment revenue. ([fda.gov](https://www.fda.gov/food/fda-food-code/food-code-2026))
2. FDA Food Code | FDA
   · Taxonomy evidence: The same model addresses restaurants and institutional foodservice, including institutions such as nursing homes, supporting a foodservice category separate from retail. ([fda.gov](https://www.fda.gov/food/retail-food-protection/fda-food-code))
3. 2022 FDA Food Code - Print Version
   · Taxonomy evidence: Its equipment provisions establish temperature-measurement and sanitation-verification needs relevant to foodservice operations, without establishing actual purchasing volumes. ([fda.gov](https://www.fda.gov/media/xx.xx/download))

4. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
5. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

6. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

7. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
8. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
9. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

10. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
11. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

12. Waters Corporation - 2025 Annual Report
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.

13. Thermo Fisher Scientific Inc. - 2025 Form 10-K
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

14. bioMérieux - 2025 Financial Results
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.

15. Neogen Corporation - Fiscal 2025 Annual Report
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

16. Testo - Annual Press Conference, January 23, 2025
- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.

17. Anritsu Integrated Report 2025
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

18. Eurofins Scientific - FY 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.

19. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

20. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
- Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

21. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.

22. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.

23. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

24. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
25. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
26. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
27. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
28. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
29. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

30. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
31. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
32. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
33. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
34. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
35. Digital Food Safety Management with testo Saveris Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
36. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.

10.4. Government Food-Control Organizations

Table 118. Global Food Safety Testing Equipment Market Size, by Government Food-Control Organizations, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 119. Global Food Safety Testing Equipment Market Size, by Government Food-Control Organizations, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 120. Global Food Safety Testing Equipment Market Size, by Government Food-Control Organizations, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. 4. Elements of a National Food Control System | FAO

   · Taxonomy evidence: FAO describes food-control laboratories under national and subnational authorities, central reference-laboratory functions and investment in analytical facilities and instruments. This establishes government food-control organizations as equipment-operating institutions, not merely funders. ([fao.org](https://www.fao.org/xx.xx/y8705e/y8705e04.htm))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.

17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
- Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.

20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.

21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
34. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.

10.5. Food Retailers

Table 121. Global Food Safety Testing Equipment Market Size, by Food Retailers, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 122. Global Food Safety Testing Equipment Market Size, by Food Retailers, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 123. Global Food Safety Testing Equipment Market Size, by Food Retailers, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Food Code 2026 - FDA
   · Taxonomy evidence: The 2026 model explicitly addresses retail food stores, supporting continued recognition of retail operating users without establishing instrument purchases. ([fda.gov](https://www.fda.gov/food/fda-food-code/food-code-2026))
2. FDA Food Code | FDA
   · Taxonomy evidence: FDA identifies grocery stores within the retail segment addressed by its Food Code, establishing a professional retail food-safety operating setting. The Food Code is a model, not a uniform worldwide requirement. ([fda.gov](https://www.fda.gov/food/retail-food-protection/fda-food-code))
3. 2022 FDA Food Code - Print Version
   · Taxonomy evidence: The model includes provision of food-temperature measuring devices, supporting a professional equipment-use setting relevant to covered retail establishments rather than only laboratory testing. ([fda.gov](https://www.fda.gov/media/xx.xx/download))

4. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
5. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

6. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

7. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
8. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
9. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

10. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
11. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

12. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
13. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
14. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
15. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
16. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
17. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

18. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
19. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
20. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
21. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
22. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
23. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

24. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
25. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
26. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
27. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
28. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
29. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

30. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
31. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
32. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
33. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
34. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
35. Digital Food Safety Management with testo Saveris Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
36. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.

10.6. Primary Food Producers

Table 124. Global Food Safety Testing Equipment Market Size, by Primary Food Producers, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 125. Global Food Safety Testing Equipment Market Size, by Primary Food Producers, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 126. Global Food Safety Testing Equipment Market Size, by Primary Food Producers, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Rapid In-Field Diagnostics: Horizon Scanning and Technology Readiness Level Study With a Technology Pilot Study - FSA Research and Evidence

   · Taxonomy evidence: Grower and agronomist interviews identify possible direct investment or service-based access, not completed farm equipment purchases. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx-rapid-in-field-diagnostics-horizon-scanning-and-technology-readiness-level-study-with-a-technology-pilot-study))

2. FSMA Final Rule on Produce Safety | FDA

   · Taxonomy evidence: FDA's produce-safety framework addresses food-safety testing and environmental controls at covered farm and sprout operations. It establishes primary-production testing relevance, but does not demonstrate that farms purchase durable instruments rather than use external laboratories. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-produce-safety))

3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
34. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

10.7. Academic and Research Institutions

Table 127. Global Food Safety Testing Equipment Market Size, by Academic and Research Institutions, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 128. Global Food Safety Testing Equipment Market Size, by Academic and Research Institutions, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 129. Global Food Safety Testing Equipment Market Size, by Academic and Research Institutions, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Equipment Grants Program | NIFA

   · Taxonomy evidence: The equipment-grant program identifies higher-education and cooperative research institutions as recipients able to acquire shared special-purpose instruments for food and agricultural science. This establishes an institutional acquisition route, not a food-safety-only expenditure allocation. ([nifa.usda.gov](https://www.nifa.usda.gov/grants/funding-opportunities/equipment-grants-program))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

2. Activities: Projects : LMD

   · Taxonomy evidence: The public project listing identifies a university equipment-acquisition project expressly linking an analytical instrument with food-safety research. The listing establishes an acquisition-project setting, not current deployment or wholly food-safety-attributable instrument revenue. ([training-portal.nifa.usda.gov](https://training-portal.nifa.usda.gov/lmdr/projects?agency=NIFA&page=xx.xx&sort=title&source=creems_priv&state=&type=O))

3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
34. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.

10.8. Food-Contact Material Manufacturers

Table 130. Global Food Safety Testing Equipment Market Size, by Food-Contact Material Manufacturers, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 131. Global Food Safety Testing Equipment Market Size, by Food-Contact Material Manufacturers, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 132. Global Food Safety Testing Equipment Market Size, by Food-Contact Material Manufacturers, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Legislation - Food-Contact Materials - European Commission

   · Taxonomy evidence: Manufacturer responsibilities and supporting compliance documentation are established, but the page does not establish manufacturers' ownership of testing instruments rather than outsourced laboratory use. ([food.ec.europa.eu](https://food.ec.europa.eu/food-safety/chemical-safety/food-contact-materials/legislation_en))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.

2. Legislation - Food Safety - European Commission

   · Taxonomy evidence: Food-contact compliance documentation and declarations are linked to manufacturers' responsibilities. This supports a distinct manufacturer compliance setting, but does not establish whether manufacturers own testing equipment or outsource the work. ([food.ec.europa.eu](https://food.ec.europa.eu/food-safety/chemical-safety/food-contact-materials/legislation_en?prefLang=es))

3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Capital-cost differentiation constrains the ownership-versus-outsourcing model; it does not observe food-contact manufacturers' purchases.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Capital-cost differentiation constrains the ownership-versus-outsourcing model; it does not observe food-contact manufacturers' purchases.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

10.9. Food Distribution and Logistics Businesses

Table 133. Global Food Safety Testing Equipment Market Size, by Food Distribution and Logistics Businesses, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 134. Global Food Safety Testing Equipment Market Size, by Food Distribution and Logistics Businesses, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 135. Global Food Safety Testing Equipment Market Size, by Food Distribution and Logistics Businesses, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. FSMA Final Rule on Sanitary Transportation of Human and Animal Food | FDA

   · Taxonomy evidence: FDA's sanitary-transportation framework distinguishes shippers, loaders, carriers and receivers and addresses contamination prevention and temperature control. Responsibility can depend on agreements, so a transportation role alone does not identify the equipment purchaser or operator. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-sanitary-transportation-human-and-animal-food))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.

2. UNSD - Classification Detail: ISIC Rev. 4, Code 4630

   · Taxonomy evidence: ISIC Rev. xx.xx Code xx.xx recognizes food and beverage wholesale as a commercial activity distinct from manufacturing and retail. Only its human-food and beverage activities fit the proposed market boundary. ([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Detail/EN/xx.xx/xx.xx))

3. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
34. Digital Food Safety Management with testo Saveris Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.

11. Food Safety Testing Equipment Market, by Deployment Configuration

Deployment Configuration changes the delivery and accountability package independently of the underlying platform. [redacted] A mobile buyer should confirm the documented application, continuing record access, and local support rather than treat portability as a substitute for those conditions.

Stationary Standalone Equipment can still require a substantial handover commitment. [redacted] Buyers comparing a standalone installation with a wider system project should retain these obligations in the comparison instead of treating standalone as synonymous with unsupported hardware delivery.

Production-Line-Integrated Equipment adds a relationship with the manufacturing installation. [redacted] An integrated route is appropriate when the required inspection role and accountable delivery package are established; a separately installed alternative remains relevant where production-line integration is not required.

Figure 16. Global Food Safety Testing Equipment Market Size, by Deployment Configuration, 2025 (%)

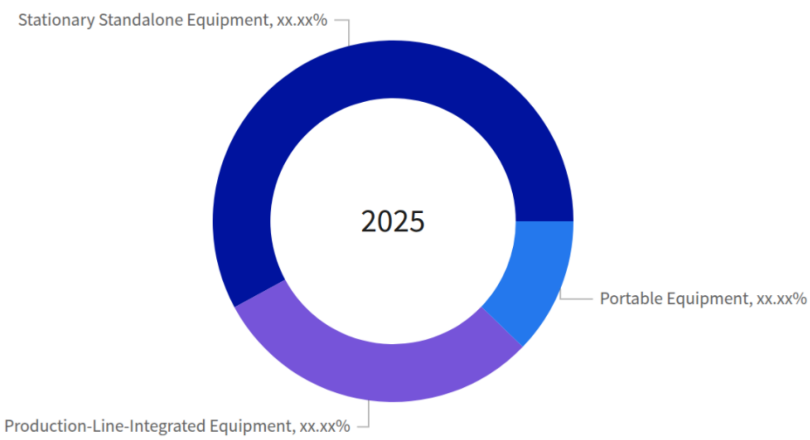

Figure 17. Global Food Safety Testing Equipment Market, by Deployment Configuration, 2032 (USD Million)

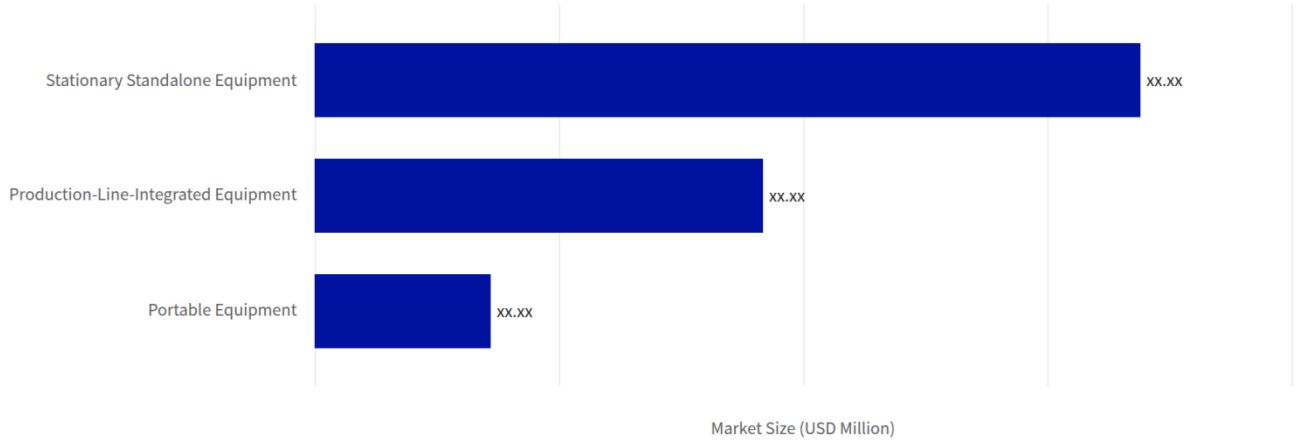

Table 136. Global Food Safety Testing Equipment Market, by Deployment Configuration growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 137. Global Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
   · The requested LC-MS package includes installation, commissioning, staff training, warranty, and preventive maintenance. The notice does not establish completed fulfillment.

2. EnSURE Touch ATP Luminometer for Hygiene Monitoring
   - The handheld instrument includes Wi-Fi connectivity to SureTrend for records management, showing that portable hardware can retain a connected-platform relationship.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
3. Cabinet X-Ray Systems (Closed X-Ray Systems) - FDA
   - FDA describes applicable cabinet X-ray product obligations separately from OSHA or state oversight of use, supporting an equipment- and location-specific purchasing check.
4. FoodScreen - Radiological Food Screening System
   - FoodScreen is described as transportable food-analysis equipment, with local representative assistance offered. Transportability does not establish another application's suitability.
5. About METTLER TOLEDO Product Inspection
   - The company describes standalone and fully integrated systems, lifecycle support, and relationships with manufacturers, system integrators, and OEMs. Actual responsibility remains contractual.
6. Food inspection technology - Food Science and Technology
   - Taxonomy evidence: Production-line installation is a documented physical deployment distinction, separate from the underlying inspection technology. ([academic.oup.com](https://academic.oup.com/fst/article/xx.xx/xx.xx/xx.xx/xx.xx))
7. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
8. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware constrain the analytical value bridge. They are not deployment shares or universal selling prices.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware constrain the analytical value bridge. They are not deployment shares or universal selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The hardware-cost comparison supports retaining substantial value in capital-intensive laboratory systems and separating equipment investment from other laboratory costs; the forecast reuses this base-model price relationship.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The hardware-cost comparison supports retaining substantial value in capital-intensive laboratory systems and separating equipment investment from other laboratory costs; the forecast reuses this base-model price relationship.

9. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

10. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
    - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
    - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
11. Agilent Technologies - 2017 Annual Report
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
12. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

13. Agilent Technologies - Fiscal 2025 Annual Report
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.

14. Agilent Technologies - Q1 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

15. Waters Corporation - 2025 Annual Report
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.

16. Thermo Fisher Scientific Inc. - 2025 Form 10-K
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

17. bioMérieux - 2025 Financial Results
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.

18. Neogen Corporation - Fiscal 2025 Annual Report
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

19. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
20. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
21. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
22. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
23. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

24. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
25. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
26. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
27. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
28. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

29. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

11.1. Stationary Standalone Equipment

Table 138. Global Food Safety Testing Equipment Market Size, by Stationary Standalone Equipment, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 139. Global Food Safety Testing Equipment Market Size, by Stationary Standalone Equipment, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 140. Global Food Safety Testing Equipment Market Size, by Stationary Standalone Equipment, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Guidance Document for Setting Up of a Basic Functional Food Analysis Laboratory - FSSAI

   · Taxonomy evidence: The 2021 food-analysis laboratory guidance identifies benchtop instruments and fixed laboratory installations. It supports stationary equipment configurations, not blanket inclusion of every listed laboratory asset. ([fssai.gov.in](https://fssai.gov.in/upload/uploadfiles/files/Book_Food_Testing_22_12_2021.pdf))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The hardware-cost comparison supports retaining substantial value in capital-intensive laboratory systems and separating equipment investment from other laboratory costs; the forecast reuses this base-model price relationship.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The hardware-cost comparison supports retaining substantial value in capital-intensive laboratory systems and separating equipment investment from other laboratory costs; the forecast reuses this base-model price relationship.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
34. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.

35. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

11.2. Production-Line-Integrated Equipment

Table 141. Global Food Safety Testing Equipment Market Size, by Production-Line-Integrated Equipment, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 142. Global Food Safety Testing Equipment Market Size, by Production-Line-Integrated Equipment, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 143. Global Food Safety Testing Equipment Market Size, by Production-Line-Integrated Equipment, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Food inspection technology - Food Science and Technology
   - Taxonomy evidence: The professional article describes food inspection systems installed on production lines for real-time assessment, including physical-contamination inspection. This independently supports an integrated deployment distinction. ([academic.oup.com](https://academic.oup.com/fst/article/xx.xx/xx.xx/xx.xx/xx.xx))
2. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.

17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
- Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.

20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.

21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.

11.3. Portable Equipment

Table 144. Global Food Safety Testing Equipment Market Size, by Portable Equipment, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 145. Global Food Safety Testing Equipment Market Size, by Portable Equipment, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 146. Global Food Safety Testing Equipment Market Size, by Portable Equipment, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Rapid In-Field Diagnostics: Horizon Scanning and Technology Readiness Level Study With a Technology Pilot Study - FSA Research and Evidence

   · Taxonomy evidence: The FSA-published study documents portable PCR and isothermal instrument settings in on-site food-safety work, supporting designed portability independently of buyer identity. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx-rapid-in-field-diagnostics-horizon-scanning-and-technology-readiness-level-study-with-a-technology-pilot-study))

2. Request for Proposal for Setting Up of Mobile Food Testing Laboratory (MFTL) - FSSAI

   · Taxonomy evidence: The April 2017 mobile food-testing laboratory procurement includes handheld measurement equipment, establishing a public procurement context for portable instruments. The complete vehicle package is not equipment-only market revenue. ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/RFP_Mobile_Food_Testing_Lab_21_04_2017.pdf))

3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware constrain the analytical value bridge. They are not deployment shares or universal selling prices.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware constrain the analytical value bridge. They are not deployment shares or universal selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
34. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
35. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.

36. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
37. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

12. Food Safety Testing Equipment Market, by Sales Channel

For Direct Sales, METTLER TOLEDO's standard sales terms identify the contracting entity through the order documents. Buyers should verify that entity and the agreed support package instead of inferring local fulfillment from a manufacturer-branded contact.

Distributor and Reseller Sales can place customer obligations with an independently contracting party. METTLER TOLEDO's distribution terms limit appointments to specified products and territories, require own-account transactions, and allocate corresponding warranty work to the distributor.

Agent- and Broker-Mediated Sales require a different authority check. A representative label alone should not be treated as proof of resale rights or authority to bind a manufacturer.

Figure 18. Global Food Safety Testing Equipment Market Size, by Sales Channel, 2025 (%)

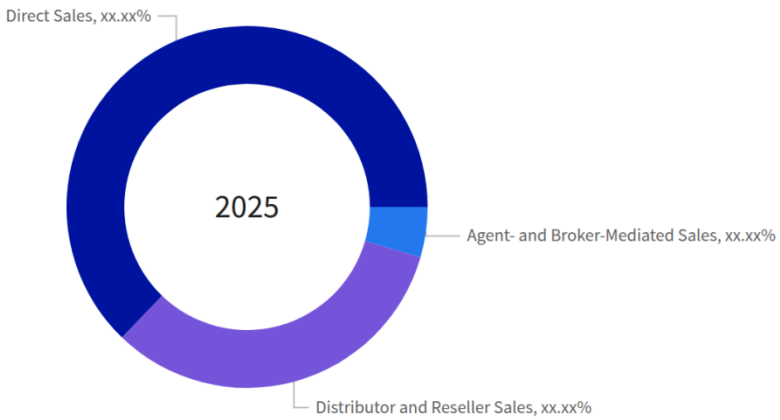

Figure 19. Global Food Safety Testing Equipment Market, by Sales Channel, 2032 (USD Million)

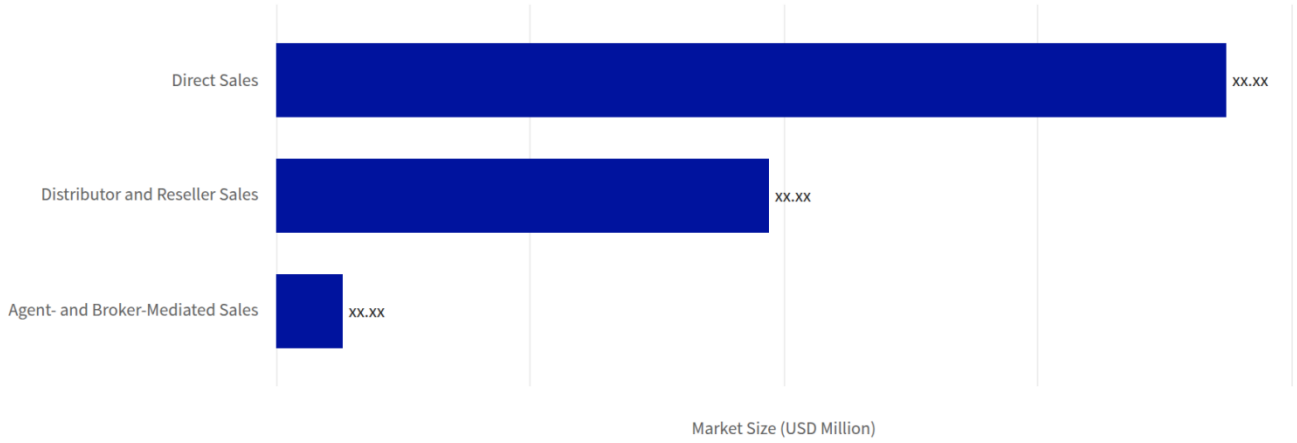

Table 147. Global Food Safety Testing Equipment Market, by Sales Channel growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 148. Global Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Mettler-Toledo Standard Terms and Conditions for Sales and Service

· METTLER TOLEDO's standard sales terms define the contract with the entity identified in quotation, order, agreement, invoice, or other order documents and make the purchased scope document-specific.

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share.
([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share.
([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

2. Frequently Asked Questions - Wholesale - US Census Bureau

· Census distinguishes manufacturer-affiliated sales organizations, own-account wholesalers, and commission-based agents or brokers. These general roles do not establish an equipment-specific agency transaction.

· Taxonomy evidence: Census distinguishes manufacturer-affiliated selling, own-account merchandise resale, agency transactions, and electronic intermediation. Ordering medium alone therefore does not establish the economic channel.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

3. METTLER TOLEDO - General Distribution Terms

   · METTLER TOLEDO's distribution terms specify product and territory appointments, own-account transactions without authority to bind the manufacturer, distributor staffing and approval duties, and corresponding customer warranty work.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

4. Request for Proposal for Setting Up of Mobile Food Testing Laboratory (MFTL) - FSSAI

   · Taxonomy evidence: The procurement distinguishes manufacturer bidders and OEM dealers, providing food-laboratory-specific evidence of different supplier roles without establishing channel shares or transaction-level ownership. ([fssai.gov.in](https://www.fssai.gov.in/upload/uploadfiles/files/RFP_Mobile_Food_Testing_Lab_21_04_2017.pdf))

5. ISIC, Rev. 4 - Code 46: Wholesale trade, except of motor vehicles and motorcycles - UNSD

   · Taxonomy evidence: ISIC Revision xx.xx distinguishes own-account wholesale trade, manufacturer-maintained sales organizations, and commission-based intermediation. These are international commercial-role anchors, not food-safety-equipment market-share estimates. ([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Structure/Detail/en/xx.xx/xx.xx))

6. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

7. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

8. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports direct sales exceeding indirect sales and a preference for direct selling of sophisticated products. This constrains the allocation direction without establishing exact food-equipment channel percentages. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports direct sales exceeding indirect sales and a preference for direct selling of sophisticated products. This constrains the allocation direction without establishing exact food-equipment channel percentages. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports significant indirect selling and 2025 distributor acquisitions, supporting coexistence of resale and controlled selling. Acquired revenue is not disclosed and acquisition spending is not used as a sales weight. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports significant indirect selling and 2025 distributor acquisitions, supporting coexistence of resale and controlled selling. Acquired revenue is not disclosed and acquisition spending is not used as a sales weight. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
9. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.

10. Agilent Technologies - 2017 Annual Report
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
11. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
12. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
13. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
14. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))

15. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
16. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
17. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
18. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The differing Instrumentation and Solutions results support retaining a heterogeneous monitoring cohort model rather than treating all monitoring revenue as enterprise-system purchasing; resale probabilities remain assumptions. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The differing Instrumentation and Solutions results support retaining a heterogeneous monitoring cohort model rather than treating all monitoring revenue as enterprise-system purchasing; resale probabilities remain assumptions. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))

19. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
20. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
21. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
22. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

23. Agilent Technologies, Inc. - Fiscal 2025 Annual Report
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

12.1. Direct Sales

Table 149. Global Food Safety Testing Equipment Market Size, by Direct Sales, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 150. Global Food Safety Testing Equipment Market Size, by Direct Sales, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 151. Global Food Safety Testing Equipment Market Size, by Direct Sales, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Frequently Asked Questions - Wholesale - U.S. Census Bureau

   · Taxonomy evidence: Manufacturer sales branches or offices are defined by ownership or corporate affiliation, supporting treatment of controlled selling organizations as direct rather than independent resale. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

   · Taxonomy evidence: Manufacturer sales branches or offices are defined through ownership or corporate affiliation with the manufacturer, supporting their treatment as owned selling rather than independent distribution. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports direct sales exceeding indirect sales and a preference for direct selling of sophisticated products. This constrains the allocation direction without establishing exact food-equipment channel percentages. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports direct sales exceeding indirect sales and a preference for direct selling of sophisticated products. This constrains the allocation direction without establishing exact food-equipment channel percentages. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.

25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.

32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

33. Agilent Technologies, Inc. - Fiscal 2025 Annual Report
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

34. Mettler-Toledo Standard Terms and Conditions for Sales and Service
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

12.2. Distributor and Reseller Sales

Table 152. Global Food Safety Testing Equipment Market Size, by Distributor and Reseller Sales, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 153. Global Food Safety Testing Equipment Market Size, by Distributor and Reseller Sales, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 154. Global Food Safety Testing Equipment Market Size, by Distributor and Reseller Sales, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Frequently Asked Questions - Wholesale - U.S. Census Bureau

   · Taxonomy evidence: Merchant distributors purchase merchandise from unrelated manufacturers and sell it to customers, supporting an own-account resale distinction. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

   · Taxonomy evidence: Merchant wholesalers buy merchandise on their own account, while distributors and importers are distinguished by their commercial activity rather than ordering medium. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

2. ISIC, Rev. 4 - Code 46: Wholesale trade, except of motor vehicles and motorcycles - UNSD

   · Taxonomy evidence: The classification identifies merchant wholesalers, including industrial distributors, as businesses taking title to the goods sold. ([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Structure/Detail/en/xx.xx/xx.xx))

3. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports significant indirect selling and 2025 distributor acquisitions, supporting coexistence of resale and controlled selling. Acquired revenue is not disclosed and acquisition spending is not used as a sales weight. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports significant indirect selling and 2025 distributor acquisitions, supporting coexistence of resale and controlled selling. Acquired revenue is not disclosed and acquisition spending is not used as a sales weight. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The differing Instrumentation and Solutions results support retaining a heterogeneous monitoring cohort model rather than treating all monitoring revenue as enterprise-system purchasing; resale probabilities remain assumptions. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The differing Instrumentation and Solutions results support retaining a heterogeneous monitoring cohort model rather than treating all monitoring revenue as enterprise-system purchasing; resale probabilities remain assumptions. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))

16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.

22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.

28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
34. Agilent Technologies, Inc. - Fiscal 2025 Annual Report
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

35. METTLER TOLEDO - General Distribution Terms
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

12.3. Agent- and Broker-Mediated Sales

Table 155. Global Food Safety Testing Equipment Market Size, by Agent- and Broker-Mediated Sales, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 156. Global Food Safety Testing Equipment Market Size, by Agent- and Broker-Mediated Sales, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 157. Global Food Safety Testing Equipment Market Size, by Agent- and Broker-Mediated Sales, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Frequently Asked Questions - Wholesale - U.S. Census Bureau

   · Taxonomy evidence: Agency roles and fee-based electronic markets are recognized separately from own-account dealing. These general roles do not establish exact-market participation or channel shares. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

2. ISIC, Rev. 4 - Code 46: Wholesale trade, except of motor vehicles and motorcycles - UNSD

   · Taxonomy evidence: The classification separately recognizes agents, brokers, and commission trade. This establishes a commercial role but not its exact-market prevalence. ([unstats.un.org](https://unstats.un.org/unsd/classifications/Econ/Structure/Detail/en/xx.xx/xx.xx))

3. 2022 NAICS Definition: 425120 Wholesale Trade Agents and Brokers - U.S. Census Bureau

   · Taxonomy evidence: Agents and brokers arrange goods transactions without taking title and receive commissions or fees; the definition also covers electronic intermediation. It does not establish food-safety-equipment sales volumes. ([census.gov](https://www.census.gov/naics/?details=xx.xx&input=xx.xx&year=2022))

4. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

5. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

6. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

7. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
8. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
9. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

10. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
11. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

12. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
13. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
14. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
15. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
16. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
17. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

18. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
19. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
20. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
21. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
22. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
23. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

24. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
25. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
26. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
27. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
28. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
29. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

30. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
31. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
32. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
33. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
34. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
35. Agilent Technologies, Inc. - Fiscal 2025 Annual Report
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
36. METTLER TOLEDO - General Distribution Terms
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

13. Food Safety Testing Equipment Market, by Tested Matrix

[illegible] Buyers should retain a product-level crosswalk and identify the intended safety objective. Prepared Meals and Composite Dishes likewise requires an explicit supplied-product description rather than an assumption that each ingredient creates a separate equipment requirement.

[illegible] These examples support comparing the exact supported application rather than assuming equivalent coverage across Dairy Products and Alternatives, Cereals and Bakery Products, meat, seafood, or composite foods. Catalog breadth does not establish that every food-safety objective or matrix is covered by the same equipment.

[illegible] The buyer should establish that use and its accepted evidence requirement before comparing equipment or external laboratory fulfillment. A shared water-analysis description is insufficient to establish suitability across agricultural water, a processing input, and a finished beverage.

Food-Contact Materials and Articles concerns material-safety evidence rather than merely contamination on a contact surface. The European Commission links plastic food-contact declarations of compliance to supporting safety documentation. [illegible]

Food-Chain Environments contains complementary surface and preventive-condition purchasing roles. FDA distinguishes food-production environmental contamination from product sampling, while Testo markets standalone and connected monitoring for transport and storage conditions. [illegible]

[redacted]

Air-related requirements need a separate application check. [redacted] This unresolved distinction does not remove air-related food-chain environments from the study.

Figure 20. Global Food Safety Testing Equipment Market Size, by Tested Matrix, 2025 (%)

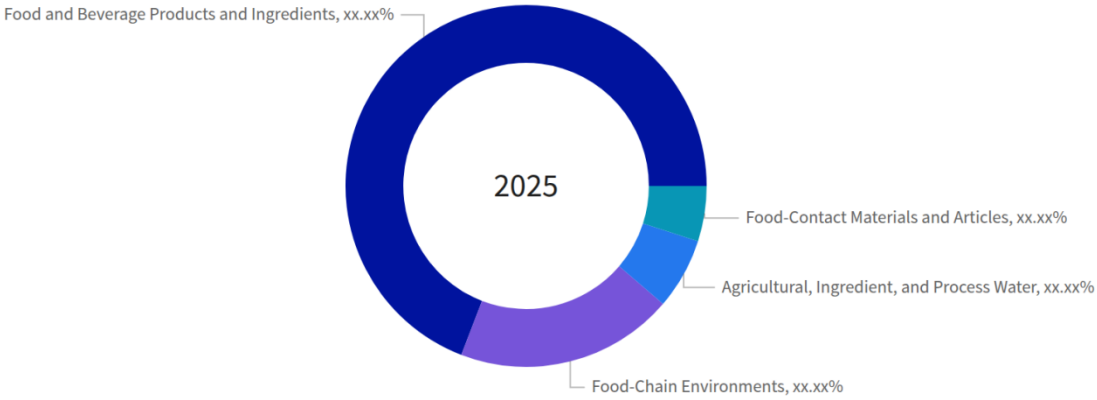

Figure 21. Global Food Safety Testing Equipment Market, by Tested Matrix, 2032 (USD Million)

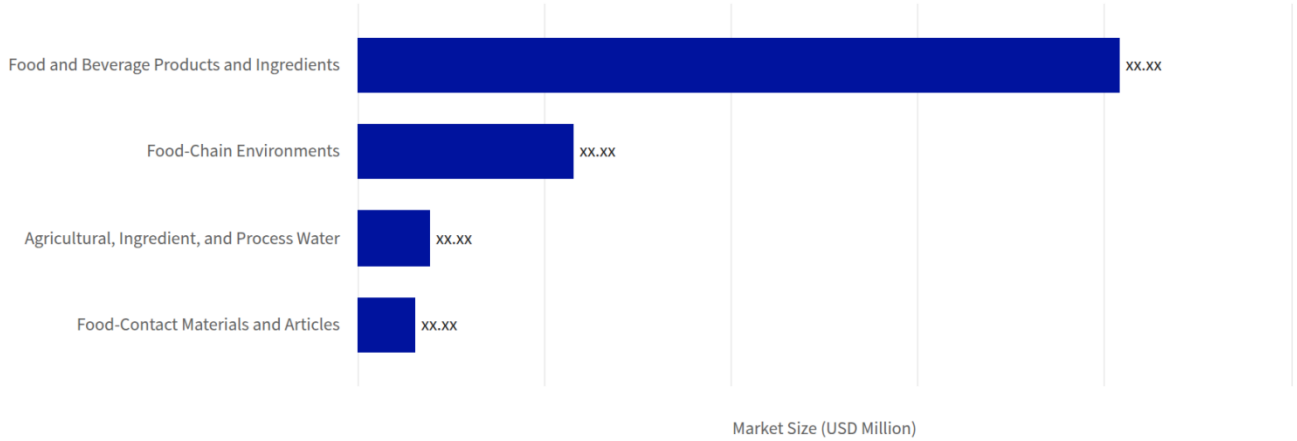

Table 158. Global Food Safety Testing Equipment Market, by Tested Matrix growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 159. Global Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Legislation - Food Contact Materials

   · The European Commission links plastic food-contact declarations of compliance with supporting safety documentation available to enforcement authorities. This establishes a material-documentation relationship distinct from surface hygiene. ([food.ec.europa.eu](https://food.ec.europa.eu/food-safety/chemical-safety/food-contact-materials/legislation_en))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.

2. Environmental Sampling - FDA

   · FDA distinguishes contamination in food-production environments, including contact and non-contact surfaces, from the finished-product contamination it can contribute to. The source supports the environmental evidence role, not equipment interchangeability. ([fda.gov](https://www.fda.gov/food/sampling-protect-food-supply/environmental-sampling))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

3. Food Categories - Codex GSFA

   · Codex's hierarchy places soybean-based beverages under soybean products and separately identifies bakery, beverage, and prepared-food categories. These descriptors support a product crosswalk, not an equipment specification. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))

   · Taxonomy evidence: Foodstuffs are arranged in a hierarchical category system. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.

4. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

   · Thermo Fisher Scientific's guide for commercial laboratories covers analytical instrument applications including contaminants, fats and edible oils, additives, food-contact materials, and supplements. It supports a shared-portfolio comparison, not universal application acceptance. ([documents.thermofisher.com](https://documents.thermofisher.com/TFS-Assets/CMD/Application-Notes/ai-xx.xx-fs-food-beverage-resource-guide-compendium-directory-ai73833-en.pdf))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

5. Food Allergen Testing - Hygiena

   · Hygiena lists allergen offerings for milk, egg, fish, crustacean, soy, and other targets, and identifies Hygiena Cube as an instrument associated with specified gluten tests. These are supplier-described offerings, not proof of universal matrix coverage. ([hygiena.com](https://www.hygiena.com/allergen-diagnostics-and-data-management))

6. Safe Water Saves Water
   - FAO describes Codex water guidance as fit-for-purpose, recognizing that requirements differ by food product and intended food-chain use. Equipment suitability is a conditional commercial implication. ([fao.org](https://www.fao.org/newsroom/story/Safe-water-saves-water/))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
7. Safety That Suits You - Testo
   - Testo markets standalone transport and storage loggers, connected monitoring, and a food-safety package combining instruments, software, and service. The page establishes described alternatives, not realized customer outcomes or identical local availability. ([testo.com](https://www.testo.com/en-SG/food/monitoring))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
8. Accreditation Requirements for Food & Environmental Laboratories - EIAC
   - EIAC distinguishes food, water, and environmental laboratory scopes and includes air within environmental testing. This classification does not establish a specific airborne food-chain equipment offering. ([eiac.gov.ae](https://eiac.gov.ae/wp-content/uploads/2025/xx.xx/EIAC-RQ-LB-xx.xx-Accreditation-Requirements-for-Food-Environmental-Laboratories.pdf))
9. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
10. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware references near GBP 16k, GBP xx.xx.5k and at least GBP 416k constrain distinct equipment-cost tiers, not global ASPs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware references near GBP 16k, GBP xx.xx.5k and at least GBP 416k constrain distinct equipment-cost tiers, not global ASPs.

11. Mettler-Toledo International Inc. - 2025 Form 10-K
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
12. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
    - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
    - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
13. Agilent Technologies - 2017 Annual Report
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
14. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

15. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
16. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
17. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
18. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
19. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
20. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

21. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, Instrumentation at xx.xx% and Solutions at xx.xx%, with Solutions declining slightly. The mixed-scope result constrains an aggressive connected-hardware adoption assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, Instrumentation at xx.xx% and Solutions at xx.xx%, with Solutions declining slightly. The mixed-scope result constrains an aggressive connected-hardware adoption assumption.
22. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
23. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
24. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
25. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

13.1. Food and Beverage Products and Ingredients

Table 160. Global Food Safety Testing Equipment Market, by Food and Beverage Products and Ingredients growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 161. Global Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 162. Global Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 163. Global Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Food Categories - Codex GSFA
   - Taxonomy evidence: The Codex hierarchy provides recognized food descriptors, not equipment-spending segments. Adapting its categories therefore requires explicit product crosswalks. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Taxonomy evidence: The classification supplies commodity descriptors for foods and ingredients. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.

2. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware references near GBP 16k, GBP xx.xx.5k and at least GBP 416k constrain distinct equipment-cost tiers, not global ASPs.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware references near GBP 16k, GBP xx.xx.5k and at least GBP 416k constrain distinct equipment-cost tiers, not global ASPs.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Cost-tier differentiation supports a priced laboratory allocation rather than treating all dairy-related purchasing exposures equally.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Cost-tier differentiation supports a priced laboratory allocation rather than treating all dairy-related purchasing exposures equally.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hardware-cost dispersion constrains the value bridge for cereal and bakery exposure; retained forecast hardware mix is an assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hardware-cost dispersion constrains the value bridge for cereal and bakery exposure; retained forecast hardware mix is an assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: High-cost analytical equipment and lower-cost readers require separate value weights; seafood-specific exposure counts remain modeled.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: High-cost analytical equipment and lower-cost readers require separate value weights; seafood-specific exposure counts remain modeled.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost-tier evidence constrains equipment-value weighting, not the assumed supplement purchasing volume.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost-tier evidence constrains equipment-value weighting, not the assumed supplement purchasing volume.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

33. Food and Beverage Resource Guide for Commercial Food Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
34. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.
35. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
36. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.

13.1.1. Meat and Poultry Products

Table 164. Global Food Safety Testing Equipment Market Size, by Meat and Poultry Products, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 165. Global Food Safety Testing Equipment Market Size, by Meat and Poultry Products, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 166. Global Food Safety Testing Equipment Market Size, by Meat and Poultry Products, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Meat and meat products, including poultry and game (08.0) - Codex

   · Taxonomy evidence: Food category xx.xx covers fresh and processed meat, poultry, and game products. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=4073ded6-249a-f111-b8dc-70a8a5613865))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

13.1.2. Cereals and Bakery Products

Table 167. Global Food Safety Testing Equipment Market Size, by Cereals and Bakery Products, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 168. Global Food Safety Testing Equipment Market Size, by Cereals and Bakery Products, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 169. Global Food Safety Testing Equipment Market Size, by Cereals and Bakery Products, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Food Categories - Codex GSFA
   - Taxonomy evidence: The hierarchy places soybean beverages under cereal/soybean products, while separately identifying bakery products. This prevents treating the retained combined node as a literal import of all underlying codes. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Taxonomy evidence: Bakery products are category xx.xx. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
2. Cereals and cereal products, excluding bakery wares (06.0) - Codex
   - Taxonomy evidence: Food category xx.xx includes unprocessed and processed cereal products and distinguishes bakery category xx.xx; the proposed node combines these two explicit groups. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=1773ded6-249a-f111-b8dc-70a8a5613865))
3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hardware-cost dispersion constrains the value bridge for cereal and bakery exposure; retained forecast hardware mix is an assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hardware-cost dispersion constrains the value bridge for cereal and bakery exposure; retained forecast hardware mix is an assumption.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

13.1.3. Dairy Products and Alternatives

Table 170. Global Food Safety Testing Equipment Market Size, by Dairy Products and Alternatives, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 171. Global Food Safety Testing Equipment Market Size, by Dairy Products and Alternatives, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 172. Global Food Safety Testing Equipment Market Size, by Dairy Products and Alternatives, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Dairy Products and Analogues, Excluding Products of Category 02.0 (01.0) - Codex

   · Taxonomy evidence: The official dairy descriptor recognizes dairy products and a defined analog subset involving replacement of milk fat. It does not establish that every commercially described dairy alternative belongs to this official category. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=b272ded6-249a-f111-b8dc-70a8a5613865))

   · Taxonomy evidence: Food category xx.xx recognizes dairy products and defined analogs while excluding category xx.xx fat products. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=b272ded6-249a-f111-b8dc-70a8a5613865))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Cost-tier differentiation supports a priced laboratory allocation rather than treating all dairy-related purchasing exposures equally.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Cost-tier differentiation supports a priced laboratory allocation rather than treating all dairy-related purchasing exposures equally.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.

17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
- Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.

20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.

21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
34. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.

13.1.4. Fruits, Vegetables, Nuts, and Seeds

Table 173. Global Food Safety Testing Equipment Market Size, by Fruits, Vegetables, Nuts, and Seeds, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 174. Global Food Safety Testing Equipment Market Size, by Fruits, Vegetables, Nuts, and Seeds, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 175. Global Food Safety Testing Equipment Market Size, by Fruits, Vegetables, Nuts, and Seeds, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Fruits and vegetables, seaweeds, and nuts and seeds (04.0) - Codex
   - Taxonomy evidence: Food category xx.xx recognizes fresh and processed produce and includes fungi, roots, legumes, seaweeds, nuts, and seeds. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=e572ded6-249a-f111-b8dc-70a8a5613865))
2. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
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    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

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    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
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18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

13.1.5. Non-Dairy Beverages and Packaged Drinking Water

Table 176. Global Food Safety Testing Equipment Market Size, by Non-Dairy Beverages and Packaged Drinking Water, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 177. Global Food Safety Testing Equipment Market Size, by Non-Dairy Beverages and Packaged Drinking Water, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 178. Global Food Safety Testing Equipment Market Size, by Non-Dairy Beverages and Packaged Drinking Water, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Food Categories - Codex GSFA

· Taxonomy evidence: Soybean beverages and the main beverage category appear in different parts of the hierarchy. Assigning all non-dairy beverage-form products to one retained node is an analytical adaptation, not an official equivalence.
([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.

2. Beverages, Excluding Dairy Products (14.0) - Codex

· Taxonomy evidence: The official beverage descriptor recognizes alcoholic and nonalcoholic beverages and places dairy-based beverages in the dairy category. This supports a beverage-versus-dairy distinction but not a complete equipment-market allocation.
([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=a073ded6-249a-f111-b8dc-70a8a5613865))

· Taxonomy evidence: Food category xx.xx distinguishes alcoholic and nonalcoholic beverages from dairy-based beverages, which remain in category xx.xx.
([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=a073ded6-249a-f111-b8dc-70a8a5613865))

3. Processing & Marketing - Food and Beverage Manufacturing

· Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

· Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.

· Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.

18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
- Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.

21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.

22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

13.1.6. Fish and Seafood Products

Table 179. Global Food Safety Testing Equipment Market Size, by Fish and Seafood Products, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 180. Global Food Safety Testing Equipment Market Size, by Fish and Seafood Products, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 181. Global Food Safety Testing Equipment Market Size, by Fish and Seafood Products, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Fish and fish products, including mollusks, crustaceans, and echinoderms (09.0) - Codex

   · Taxonomy evidence: Food category xx.xx recognizes fresh and processed aquatic food products, including mollusks and crustaceans.
   ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=5373ded6-249a-f111-b8dc-70a8a5613865))

2. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: High-cost analytical equipment and lower-cost readers require separate value weights; seafood-specific exposure counts remain modeled.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: High-cost analytical equipment and lower-cost readers require separate value weights; seafood-specific exposure counts remain modeled.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.

13.1.7. Salt, Spices, Soups, Sauces, Salads, and Protein Products

Table 182. Global Food Safety Testing Equipment Market Size, by Salt, Spices, Soups, Sauces, Salads, and Protein Products, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 183. Global Food Safety Testing Equipment Market Size, by Salt, Spices, Soups, Sauces, Salads, and Protein Products, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 184. Global Food Safety Testing Equipment Market Size, by Salt, Spices, Soups, Sauces, Salads, and Protein Products, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Food Categories - Codex GSFA

   · Taxonomy evidence: Category xx.xx covers seasonings, soups, sauces, salads, yeast, and protein products. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

13.1.8. Confectionery and Sweeteners

Table 185. Global Food Safety Testing Equipment Market Size, by Confectionery and Sweeteners, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 186. Global Food Safety Testing Equipment Market Size, by Confectionery and Sweeteners, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 187. Global Food Safety Testing Equipment Market Size, by Confectionery and Sweeteners, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Food Categories - Codex GSFA
   - Taxonomy evidence: Confectionery is category xx.xx. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
2. Sweeteners, including honey (11.0) - Codex
   - Taxonomy evidence: Food category xx.xx recognizes sugars, sweetener products, and honey, supporting the sweetener portion of the combined commodity group. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=6e73ded6-249a-f111-b8dc-70a8a5613865))
3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.

18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
- Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.

21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.

22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

13.1.9. Prepared Meals and Composite Dishes

Table 188. Global Food Safety Testing Equipment Market Size, by Prepared Meals and Composite Dishes, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 189. Global Food Safety Testing Equipment Market Size, by Prepared Meals and Composite Dishes, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 190. Global Food Safety Testing Equipment Market Size, by Prepared Meals and Composite Dishes, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Prepared foods (16.0) - Codex

   · Taxonomy evidence: The prepared-food descriptor recognizes multi-component foods requiring limited consumer preparation. The proposed category uses that positive product definition rather than a generic unmatched-food remainder. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=c673ded6-249a-f111-b8dc-70a8a5613865))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.

17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
- Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.

20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.

21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.

13.1.10. Special Dietary Foods and Supplements

Table 191. Global Food Safety Testing Equipment Market Size, by Special Dietary Foods and Supplements, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 192. Global Food Safety Testing Equipment Market Size, by Special Dietary Foods and Supplements, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 193. Global Food Safety Testing Equipment Market Size, by Special Dietary Foods and Supplements, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Food Categories - Codex GSFA
   - Taxonomy evidence: Category xx.xx separately includes infant, medical, dietetic, and supplement products. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
2. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost-tier evidence constrains equipment-value weighting, not the assumed supplement purchasing volume.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost-tier evidence constrains equipment-value weighting, not the assumed supplement purchasing volume.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Food and Beverage Resource Guide for Commercial Food Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.

13.1.11. Ready-to-Eat Savory Snacks

Table 194. Global Food Safety Testing Equipment Market Size, by Ready-to-Eat Savory Snacks, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 195. Global Food Safety Testing Equipment Market Size, by Ready-to-Eat Savory Snacks, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 196. Global Food Safety Testing Equipment Market Size, by Ready-to-Eat Savory Snacks, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Food Categories - Codex GSFA
   - Taxonomy evidence: Category xx.xx includes starch-based, processed-nut, and fish snacks. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
2. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
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   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
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   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
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   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

13.1.12. Food Additives and Processing Aids

Table 197. Global Food Safety Testing Equipment Market Size, by Food Additives and Processing Aids, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 198. Global Food Safety Testing Equipment Market Size, by Food Additives and Processing Aids, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 199. Global Food Safety Testing Equipment Market Size, by Food Additives and Processing Aids, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Joint FAO/WHO Expert Committee on Food Additives (JECFA) - FAO

   · Taxonomy evidence: JECFA's public mandate includes safety assessment of food additives, flavoring agents, and processing aids, and development of food-additive specifications. This supports material identity and safety relevance, not equipment spending. ([fao.org](https://www.fao.org/food-safety/scientific-advice/jecfa/))

2. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

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    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
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    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
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    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
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    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
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    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Food and Beverage Resource Guide for Commercial Food Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.

13.1.13. Fats, Oils, and Fat Emulsions

Table 200. Global Food Safety Testing Equipment Market Size, by Fats, Oils, and Fat Emulsions, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 201. Global Food Safety Testing Equipment Market Size, by Fats, Oils, and Fat Emulsions, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 202. Global Food Safety Testing Equipment Market Size, by Fats, Oils, and Fat Emulsions, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Fats and oils, and fat emulsions (02.0) - Codex
   - Taxonomy evidence: Food category xx.xx encompasses fat-based products from vegetable, animal, marine, or mixed sources. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=d872ded6-249a-f111-b8dc-70a8a5613865))
2. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Food and Beverage Resource Guide for Commercial Food Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.

13.1.14. Eggs and Egg Products

Table 203. Global Food Safety Testing Equipment Market Size, by Eggs and Egg Products, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 204. Global Food Safety Testing Equipment Market Size, by Eggs and Egg Products, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 205. Global Food Safety Testing Equipment Market Size, by Eggs and Egg Products, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Eggs and egg products (10.0) - Codex

   · Taxonomy evidence: Food category xx.xx separately recognizes fresh eggs and egg products. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=6673ded6-249a-f111-b8dc-70a8a5613865))

2. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
34. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

13.1.15. Edible Ices

Table 206. Global Food Safety Testing Equipment Market Size, by Edible Ices, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 207. Global Food Safety Testing Equipment Market Size, by Edible Ices, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 208. Global Food Safety Testing Equipment Market Size, by Edible Ices, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Edible ices, including sherbet and sorbet (03.0) - Codex
   - Taxonomy evidence: Food category xx.xx covers water-based frozen desserts and confections and distinguishes them from primarily dairy frozen desserts. ([codex.fao.org](https://codex.fao.org/codex-texts/codex-online-databases/gsfa/food-categories/food-category-details?categoryId=e472ded6-249a-f111-b8dc-70a8a5613865))
2. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.

13.2. Food-Chain Environments

Table 209. Global Food Safety Testing Equipment Market Size, by Food-Chain Environments, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 210. Global Food Safety Testing Equipment Market Size, by Food-Chain Environments, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 211. Global Food Safety Testing Equipment Market Size, by Food-Chain Environments, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Environmental Sampling - FDA

· Taxonomy evidence: FDA distinguishes environmental contamination on food-contact and non-food-contact surfaces from product sampling. This directly supports the surface-contamination subset, not every airborne or condition-monitoring use. ([fda.gov](https://www.fda.gov/food/sampling-protect-food-supply/environmental-sampling))

· Taxonomy evidence: FDA distinguishes food-production environmental samples from product samples and recognizes both food-contact and non-food-contact surfaces. This directly supports the surface-contamination portion of the environmental matrix, not every proposed environmental-monitoring use. ([fda.gov](https://www.fda.gov/food/sampling-protect-food-supply/environmental-sampling))

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

2. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
3. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

4. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

5. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
6. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
7. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

8. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
9. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

10. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
11. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
12. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
13. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
14. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, Instrumentation at xx.xx% and Solutions at xx.xx%, with Solutions declining slightly. The mixed-scope result constrains an aggressive connected-hardware adoption assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, Instrumentation at xx.xx% and Solutions at xx.xx%, with Solutions declining slightly. The mixed-scope result constrains an aggressive connected-hardware adoption assumption.
15. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

16. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
17. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
18. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
19. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
20. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
21. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

22. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
23. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
24. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
25. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
26. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
27. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

28. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
29. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
30. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
31. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
32. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
33. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

13.3. Agricultural, Ingredient, and Process Water

Table 212. Global Food Safety Testing Equipment Market Size, by Agricultural, Ingredient, and Process Water, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 213. Global Food Safety Testing Equipment Market Size, by Agricultural, Ingredient, and Process Water, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 214. Global Food Safety Testing Equipment Market Size, by Agricultural, Ingredient, and Process Water, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Rapid In-Field Diagnostics: Horizon Scanning and Technology Readiness Level Study With a Technology Pilot Study - FSA Research and Evidence

   · Taxonomy evidence: The documented irrigation-water setting establishes food-chain input-water relevance rather than packaged drinking-water testing. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx-rapid-in-field-diagnostics-horizon-scanning-and-technology-readiness-level-study-with-a-technology-pilot-study))

2. Safe water saves water - FAO

   · Taxonomy evidence: FAO describes food-safety considerations for water used throughout food production and processing and distinguishes suitability by intended use. This supports a food-chain input-water matrix distinct from beverage products. ([fao.org](https://www.fao.org/newsroom/story/Safe-water-saves-water/))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.

3. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.
20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

13.4. Food-Contact Materials and Articles

Table 215. Global Food Safety Testing Equipment Market Size, by Food-Contact Materials and Articles, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 216. Global Food Safety Testing Equipment Market Size, by Food-Contact Materials and Articles, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 217. Global Food Safety Testing Equipment Market Size, by Food-Contact Materials and Articles, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Legislation - Food-Contact Materials - European Commission

   · Taxonomy evidence: The Commission identifies migration assessment and compliance documentation within food-contact-material safety. This supports a material-safety matrix distinct from surface contamination.
   ([food.ec.europa.eu](https://food.ec.europa.eu/food-safety/chemical-safety/food-contact-materials/legislation_en))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.

2. Food Packaging & Other Substances that Come in Contact with Food - Information for Consumers - FDA

   · Taxonomy evidence: FDA explains that food-contact substance safety review considers testing data on migration into food and consumer exposure. This establishes contact materials as a distinct safety-assessment subject.
   ([fda.gov](https://www.fda.gov/food/food-ingredients-packaging/food-packaging-other-substances-come-contact-food-information-consumers))

3. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.

4. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.

5. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

6. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
7. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
8. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

9. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
10. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

11. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
12. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
13. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
14. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
15. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
16. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

17. Eurofins Scientific - FY 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.

18. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

19. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
- Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

20. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.

21. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.

22. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

23. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
24. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
25. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
26. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
27. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
28. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

29. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
30. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
31. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
32. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
33. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
34. Food and Beverage Resource Guide for Commercial Food Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

14. Food Safety Testing Equipment Market, by Region

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North America requires separate qualification of regulatory acceptance pathways. ■■■■■ ■■■■ ■■■■■■■ ■■■■■■■ ■■ ■■■■■■■■■ ■■ ■■■■■■■ ■■■■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■ ■■■■ ■■■■■ ■■■■ ■■■■■■■■■■■■■ ■■■■■■ ■■■■ ■■■■■■■■■■■ ■■■■■■■■■■■■■■■ ■■■■■■■■■■■■■■ ■ ■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■ ■■■■ ■■■ ■■■■ ■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■■■■■■■■■■ Laboratory buyers should establish the intended accepted activity before choosing equipment; suppliers can reuse relevant commercial documentation without promising a region-wide laboratory permission.

Latin America includes institutional purchasing relationships that cannot be inferred from food-manufacturing activity alone. ■■■■■■■■ ■■■■■ ■■■■ ■■■■■■■■■■ ■■■■■■ ■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■■■■■■ ■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■ ■■■■■■ ■■■■ ■■■■■■■■ ■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■ ■■■■■■■■■ ■■■■■■■■■■■■ The Brazilian arrangement does not establish the recognition or purchasing conditions of neighboring countries.

■■■■■■■■ ■■■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■ ■■■■■■■■■■■■■ ■■■■■■■ ■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■ ■■■■■■■■ ■■■■■ ■■■■■■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■ ■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ A supplier targeting these buyers must connect its offering to the laboratory's accepted scope rather than present instrument acquisition as designation. This EU mechanism should not be extended automatically to every European country or to a manufacturer's internal quality-control laboratory.

■■■ ■■■■■■■ ■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■■ ■■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■ ■■■■■ ■■■■■■■■■■ ■■■ ■ ■■■■■■■ ■■■■ ■■■■■■■■ ■■■■■■■■■ For an inspection-system buyer elsewhere in the region, that provides a route for obtaining a proposal, not proof of installation support, warranty authority, or coverage at the destination. A regional arrangement is suitable only when the actual location and obligations are included in the contract.

Africa likewise requires a distinction between a supplier's regional footprint and its undertaking at a particular site. Ishida lists operations in Nairobi and South Africa. ■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■ ■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■ ■■■■■■■ ■■■■ ■■■■■■■ ■■■ ■■■■■■■■ ■■■ ■■■■■■■■■

Figure 22. Global Food Safety Testing Equipment Market, by Region: Market share evolution, 2025-2032

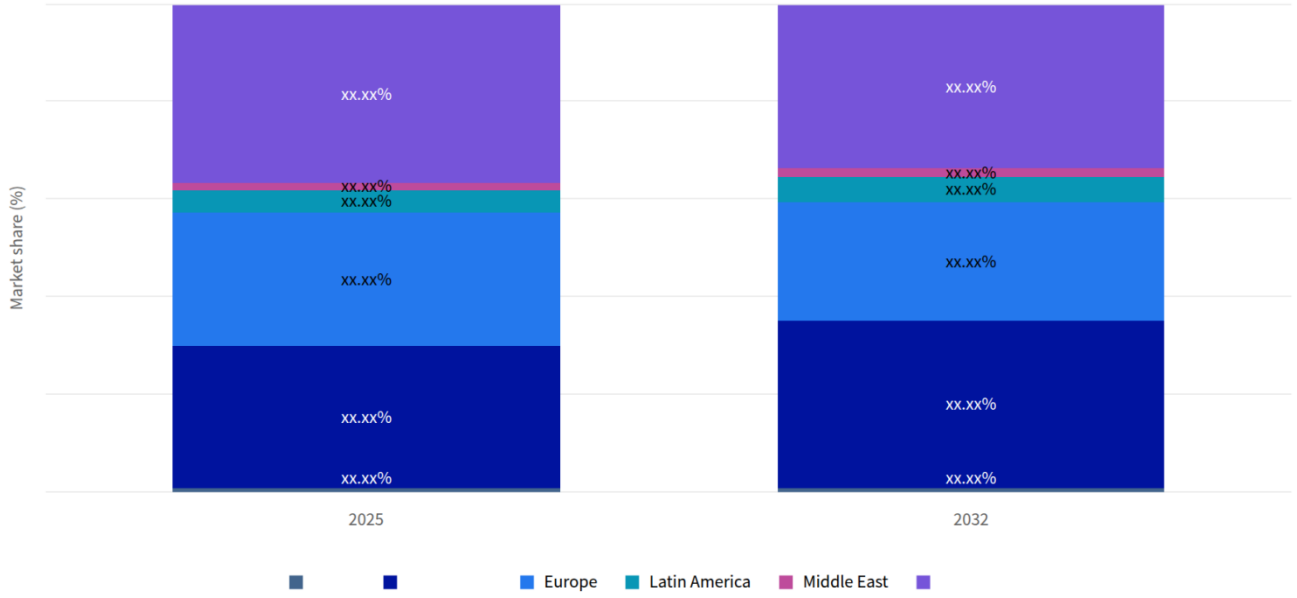

Figure 23. Global Food Safety Testing Equipment Market, by Region: Market size by category, 2025

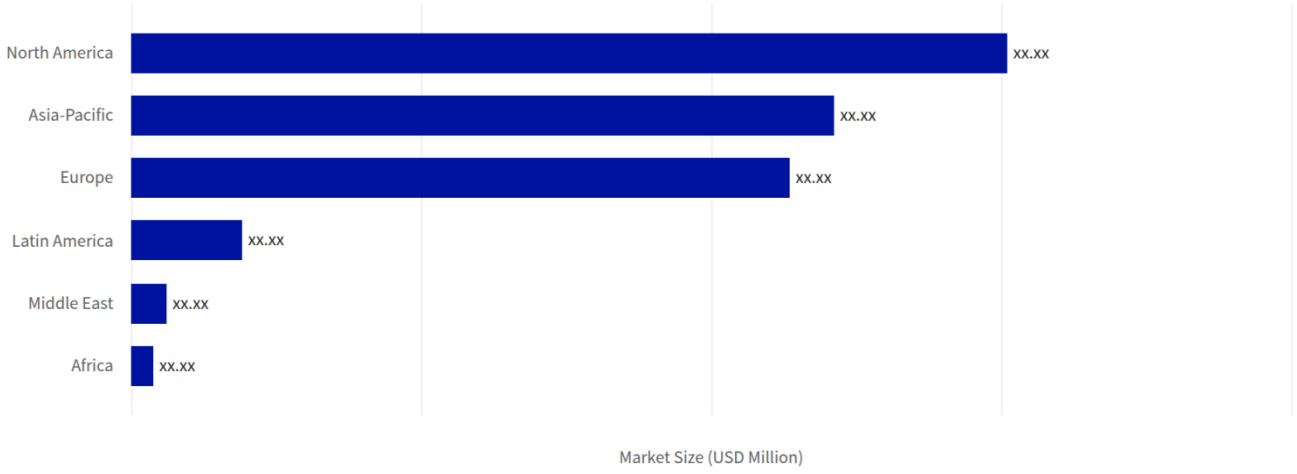

Figure 24. Global Food Safety Testing Equipment Market, Regional growth by Testing Objective, 2025-2032 (CAGR %)

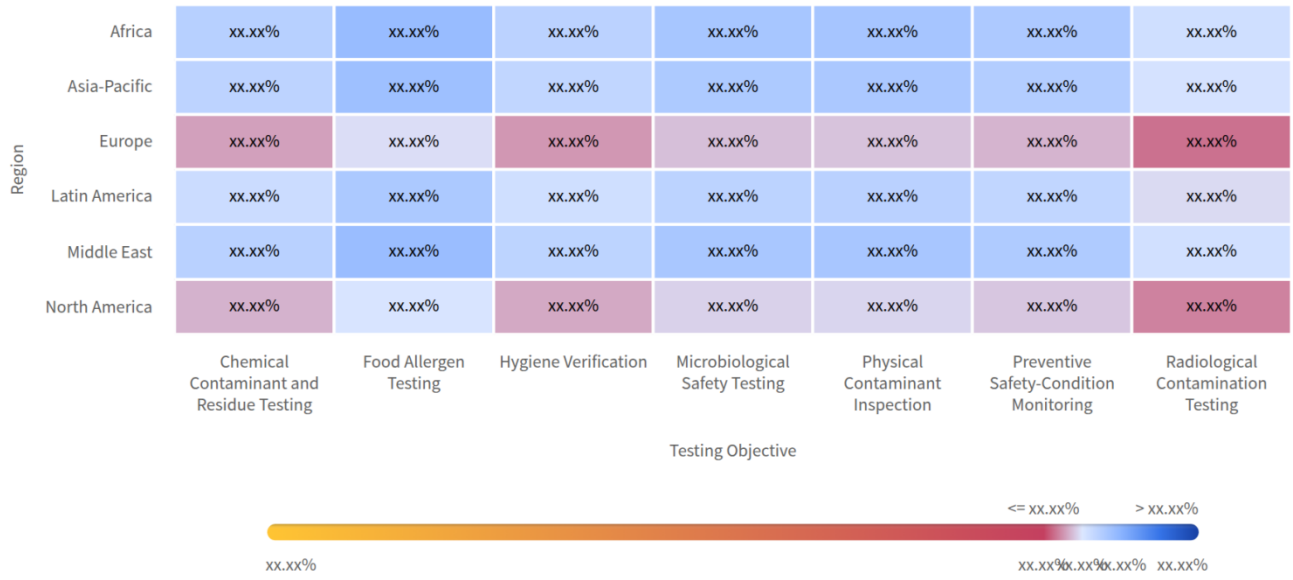

Table 218. Global Food Safety Testing Equipment Market, by Region growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 219. Global Food Safety Testing Equipment Market Size, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Asia-Pacific	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Europe	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latin America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Middle East	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North America	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule

   · FDA states that LAAF applies to specified testing circumstances rather than all food testing and describes accreditation bodies and accredited laboratories as distinct program participants. ([fda.gov](https://www.fda.gov/food/food-safety-modernization-act-fsma/laboratory-accreditation-analyses-foods-laaf-program-final-rule))

2. Ramping Up Singapore's Food Testing Capabilities

   · SFA's January xx.xx 2023 account describes recognized private laboratories supporting regulatory and industry testing needs. It establishes a documented institutional model rather than uniform regional availability. ([sfa.gov.sg](https://www.sfa.gov.sg/food-for-thought/article/detail/ramping-up-singapore%27s-food-testing-capabilities))

3. Legislation on Official Controls

   · The European Commission identifies accreditation as a condition for official-control laboratory designation and describes permanent and temporary derogations. Its scope does not establish rules for every European laboratory. ([food.ec.europa.eu](https://food.ec.europa.eu/horizontal-topics/official-controls-and-enforcement/legislation-official-controls_en))

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.

4. CFIA Framework for Quality Management Oversight of Laboratories Conducting Testing in Areas Under the CFIA Mandate

   · CFIA works with SCC and CALA accreditation arrangements incorporating agency-specific requirements. These relationships support a Canadian acceptance comparison distinct from US LAAF. ([inspection.canada.ca](https://inspection.canada.ca/en/food-safety-industry/food-chemistry-and-microbiology/laboratory-management/qmof))

5. Laboratórios Credenciados - Ministério da Agricultura e Pecuária

   · MAPA describes accredited third-party public or private laboratories as complementary to federal laboratory functions. ([gov.br](https://www.gov.br/agricultura/pt-br/assuntos/defesa-agropecuaria/laboratorios-credenciados/laboratorio-credenciado))

6. Contact Us - Ishida

   · Ishida lists a Dubai operation, a Middle East service contact, an East African operation in Nairobi, and a South African operation. These establish commercial contact points, not destination-specific contractual coverage. ([ishida.com](https://www.ishida.com/ww/en/contact-us/))

7. Foreign Official Laboratories - Ministry of Health, Labour and Welfare

   · Japan lists accepted foreign laboratories under differing export-origin coverage, demonstrating an offshore evidence route within Asia-Pacific. ([mhlw.go.jp](https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/kenkou_iryou/shokuhin/yunyu_kanshi/index_00019.html))

8. Processing & Marketing - Food and Beverage Manufacturing

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

9. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
10. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.

11. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
    - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
    - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
12. Agilent Technologies - 2017 Annual Report
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.
13. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

14. Agilent Technologies - Fiscal 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
15. Agilent Technologies - Q1 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

16. Waters Corporation - 2025 Annual Report
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
17. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
18. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
19. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
20. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
21. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

22. Eurofins Scientific - FY 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.

23. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

24. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
- Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

14.1. North America

Table 220. North America Food Safety Testing Equipment Market, by Country growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Unallocated / remaining scope	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 221. North America Food Safety Testing Equipment Market Size, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 222. North America Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 223. North America Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 224. North America Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 225. North America Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 226. North America Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 227. North America Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 228. North America Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 229. North America Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 230. North America Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Geographic customer-destination sales constrain the inspection/monitoring proxy, with an assumed North American share of the Americas bucket.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 customer ship-to regional revenues provide the laboratory-equipment geographic proxy. North America and Latin America require explicit modeled separation of the Americas bucket.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))

10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
19. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
20. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
21. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
22. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

23. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
24. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))
25. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

26. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

27. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
28. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

29. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
30. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
31. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
32. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

33. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
34. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
35. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
36. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
37. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

38. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
39. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
40. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
41. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
42. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

43. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
44. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
45. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
46. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.

47. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
48. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
49. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
50. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
51. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.

52. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
53. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
54. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
55. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
56. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

57. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

58. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

59. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

60. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

61. Food and Beverage Resource Guide for Commercial Food Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

62. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
63. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

64. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
65. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
66. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
67. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

14.2. Asia-Pacific

Table 231. Asia-Pacific Food Safety Testing Equipment Market, by Country growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Indonesia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Malaysia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Philippines	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Singapore	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Taiwan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thailand	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Unallocated / remaining scope	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 232. Asia-Pacific Food Safety Testing Equipment Market Size, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Indonesia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Malaysia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Philippines	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Singapore	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Taiwan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thailand	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 233. Asia-Pacific Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 234. Asia-Pacific Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 235. Asia-Pacific Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 236. Asia-Pacific Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 237. Asia-Pacific Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 238. Asia-Pacific Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 239. Asia-Pacific Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 240. Asia-Pacific Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 241. Asia-Pacific Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. **Processing & Marketing - Food and Beverage Manufacturing**

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World customer-destination revenue supports the scope-adjusted inspection/monitoring geographic proxy and its forecast starting position.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2025 Asia-Pacific customer-destination revenue constrains the laboratory portion of the regional allocation; the 2032 change is a modeled relative adoption scenario.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))

10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
19. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
20. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
21. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
22. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
23. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

24. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
25. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))
26. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

27. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

28. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
29. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

30. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
31. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
32. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
33. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

34. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
35. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
36. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
37. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
38. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

39. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
40. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
41. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
42. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
43. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

44. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
45. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
46. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
47. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

48. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
49. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
50. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
51. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
52. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

53. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
54. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
55. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
56. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
57. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

58. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

59. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

60. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

61. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

62. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

63. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

64. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
65. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

66. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
67. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
68. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
69. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

14.3. Europe

Table 242. Europe Food Safety Testing Equipment Market, by Country growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Austria	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Belgium	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Denmark	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Finland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Netherlands	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Norway	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Poland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Portugal	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sweden	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Switzerland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Unallocated / remaining scope	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 243. Europe Food Safety Testing Equipment Market Size, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Austria	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Belgium	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Denmark	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Finland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Netherlands	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Norway	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Poland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Portugal	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sweden	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Switzerland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 244. Europe Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 245. Europe Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 246. Europe Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 247. Europe Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 248. Europe Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 249. Europe Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 250. Europe Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 251. Europe Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 252. Europe Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European customer-destination revenue is the observed broad-scope input for inspection/monitoring allocation.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: European destination revenue constrains the laboratory proxy; the three-way Europe/Middle East/Africa adjustment is an explicit allocation assumption.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))

10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2023 national turnover and value added support the modeled score xx.xx*T+xx.xx*VA and its forecast starting weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2023 national turnover and value added support the modeled score xx.xx*T+xx.xx*VA and its forecast starting weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: National food/drink turnover and value added constrain the activity score; no equipment percentage is directly reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: National food/drink turnover and value added constrain the activity score; no equipment percentage is directly reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Danish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Danish food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Finnish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Finnish food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Dutch food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Dutch food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Polish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Polish food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Portuguese food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Portuguese food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Swedish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Swedish food-industry turnover/value-added inputs.

19. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
20. European Commission - Legislation on official controls
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official-control requirements locate institutional buyers and laboratory recognition conditions, not common European purchasing authority or an observed equipment share.
21. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

22. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
23. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))
24. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

25. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

26. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
27. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

28. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
29. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
30. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
31. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

32. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
33. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
34. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
35. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
36. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

37. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
38. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
39. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
40. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
41. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

42. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
43. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
44. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
45. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

46. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
47. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
48. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
49. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
50. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

51. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
52. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
53. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
54. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
55. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

56. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

57. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

58. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

59. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

60. Mettler-Toledo Standard Terms and Conditions for Sales and Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
61. Food and Beverage Resource Guide for Commercial Food Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

62. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
63. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

64. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
65. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
66. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
67. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

14.4. Latin America

Table 253. Latin America Food Safety Testing Equipment Market, by Country growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Argentina	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chile	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Colombia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Peru	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Unallocated / remaining scope	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 254. Latin America Food Safety Testing Equipment Market Size, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Argentina	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chile	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Colombia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Peru	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 255. Latin America Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 256. Latin America Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 257. Latin America Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 258. Latin America Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 259. Latin America Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 260. Latin America Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 261. Latin America Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 262. Latin America Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 263. Latin America Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas destination sales support the common commercial proxy; the Latin American split is assumed and excludes Mexico under the captured hierarchy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Americas revenue is a commercial destination input; the Latin American suballocation and future adoption index are modeled, not disclosed.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))

10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
19. US International Trade Administration - Chile Agricultural Sector, November 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports annual food-processing activity of USD xx.xx and describes domestic/export industrial customers. The model uses processing activity without adding food export value.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports annual food-processing activity of USD xx.xx and describes domestic/export industrial customers. The model uses processing activity without adding food export value.
20. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
21. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

22. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
23. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))
24. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

25. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

26. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
27. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

28. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
29. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
30. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
31. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

32. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
33. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
34. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
35. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
36. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

37. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
38. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
39. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
40. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
41. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

42. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
43. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
44. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
45. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

46. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
47. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
48. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
49. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
50. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

51. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
52. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
53. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
54. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
55. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

56. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

57. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

58. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

59. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

60. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

61. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

62. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
63. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

64. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
65. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
66. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
67. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

14.5. Middle East

Table 264. Middle East Food Safety Testing Equipment Market, by Country growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Israel	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Qatar	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Saudi Arabia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Turkey	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Unallocated / remaining scope	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Arab Emirates	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 265. Middle East Food Safety Testing Equipment Market Size, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Israel	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Qatar	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Saudi Arabia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Turkey	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Arab Emirates	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 266. Middle East Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 267. Middle East Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 268. Middle East Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 269. Middle East Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 270. Middle East Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 271. Middle East Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 272. Middle East Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 273. Middle East Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 274. Middle East Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. **Processing & Marketing - Food and Beverage Manufacturing**

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the Middle Eastern suballocation is modeled rather than reported.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled Middle East allowance is separated; does not disclose Middle East target-market sales.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))

10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. US International Trade Administration - Turkey Agriculture, January 29, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes Turkey's formal food-processing and foodservice customer roles and a population reference of xx.xx.7m. These constrain the explicit throughput-equivalent assumption, not observed equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes Turkey's formal food-processing and foodservice customer roles and a population reference of xx.xx.7m. These constrain the explicit throughput-equivalent assumption, not observed equipment spending.
19. USDA Foreign Agricultural Service - Saudi Arabia Food Processing Ingredients, April 6, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a developing processing customer base and a cumulative broad-sector investment ambition. The model explicitly does not treat that ambition as annual food-safety equipment expenditure.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a developing processing customer base and a cumulative broad-sector investment ambition. The model explicitly does not treat that ambition as annual food-safety equipment expenditure.
20. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

21. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
22. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))
23. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

24. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

25. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
26. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

27. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
28. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
29. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
30. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

31. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
32. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
33. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
34. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
35. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

36. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
37. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
38. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
39. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
40. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

41. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
42. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
43. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
44. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

45. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
46. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
47. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
48. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
49. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

50. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
51. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
52. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
53. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
54. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

55. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

56. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

57. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

58. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

59. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

60. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

61. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
62. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

63. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
64. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
65. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
66. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

14.6. Africa

Table 275. Africa Food Safety Testing Equipment Market, by Country growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Egypt	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Kenya	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nigeria	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Unallocated / remaining scope	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 276. Africa Food Safety Testing Equipment Market Size, by Region, 2017-2040 (USD Million)

Region	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Egypt	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Kenya	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nigeria	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 277. Africa Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 278. Africa Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 279. Africa Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 280. Africa Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 281. Africa Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 282. Africa Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 283. Africa Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 284. Africa Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 285. Africa Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. **Processing & Marketing - Food and Beverage Manufacturing**

   · Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.

   · Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.

   · Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Asia/Rest-of-World destination revenue constrains the proxy pool; the African suballocation is modeled rather than reported.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supports the broad laboratory destination-sales calibration from which a modeled African allowance is separated; no African food-equipment share is reported.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))

10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.
11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
19. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
20. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

21. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

22. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

23. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
24. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

25. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
26. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
27. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
28. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

29. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
30. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
31. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
32. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
33. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

34. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
35. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
36. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
37. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
38. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

39. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
40. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
41. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
42. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

43. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
44. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
45. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
46. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
47. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

48. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
49. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
50. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
51. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
52. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

53. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

54. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

55. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

56. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

57. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

58. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

59. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
60. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

61. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
62. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
63. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
64. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

15. Food Safety Testing Equipment Market, by Group

Americas provides a laboratory-network lens rather than a collective purchasing authority. ■■■ ■■■■■■■■■■■■■■ ■■■■■■■ ■■ ■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■■ ■■■■ ■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■■■■ ■■■ ■■■■■■■ ■■■ ■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■■ ■■■■ ■■■ ■■■■■■ ■■■■■■■■■ ■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■ ■■ ■■■■■■■■■■■■■ ■■■ ■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■ US and Brazilian acceptance relationships therefore remain distinct from network membership.

Europe, Middle East & Africa can be commercially meaningful as a supplier's service organization without becoming a common regulatory jurisdiction. ■■■■■■■■ ■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■ ■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■■■■■■■■■ ■■ ■■■■ ■■ ■■■■■■■■ ■■■ ■■ ■■■■■■■■■■ ■■■■ ■■ ■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■ ■■■ ■■ ■■■■■■■■ ■■■■■■■■■■■■■■ ■■ ■■■■■■ ■■■■■■■■ ■■ ■■■■■■■■ ■■■■■■■■■■■■■■■ Buyers should distinguish a regional supply infrastructure from the obligations enforceable in their own order.

■■■■■ ■■■■■■■■■■■■■ ■■■ ■■■■■■■ ■■■■■ ■■ ■■■■■■■■■■ ■■■■■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■ ■■■■■■■■ ■ ■■■■■ ■■■ ■■■■■ ■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■ ■■■■■■■■■■■■■■■■■■■ ■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■ ■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■ ■■ ■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ An equipment supplier should therefore establish the applicable national rule and recognized buyer relationship before relying on an ASEAN label. Harmonization is a potential simplification, not proof of identical local approval or service conditions.

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Australasia illustrates the limits of a shared standards identity. Food Standards Australia New Zealand states that Chapter xx.xx food-safety standards apply to Australia only. ■■ ■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■ ■■■■■■ ■■■■■■■■■■■■ ■■■ ■■ ■■■■■■■■■■ ■■ ■ ■■■ ■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■ ■■■■■ ■■■ ■■■■■■■■ ■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■■ ■■■■■■■■■■ ■■■ ■■■■ ■■■■■ ■■■■■■■■■■■■ ■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■ ■■■■■ ■■■■■■■ ■■■■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■■■■■ ■■■■■■■■

Nordic offers a basis for comparing applicable EU/EEA food-law documentation across Denmark, Finland, Sweden, Norway, and Iceland. ■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■

■■■ ■■■■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■ ■■■■ ■■■■■ ■■■■■■■■■■■ ■■■■■■■ ■■ ■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■ ■■■■■■■ ■■■■■■■■■ ■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■ ■■■■■■■■ ■■■■■■■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■ Shared legal foundations support preparation of a common dossier, not an assumption of common procurement authority or identical implementation.

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■■■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■ ■■■ ■■■■■■■■ ■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■ ■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■ ■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■ The equipment implications remain project-specific: Brazil uses demanded laboratory scopes and public selection, while India's notified laboratories retain accreditation and reporting obligations. Suppliers should distinguish a cooperative initiative from a funded acquisition and an accepted laboratory role before committing commercial resources.

G7 is useful for comparing acceptance arrangements, not pooling permissions. Canada incorporates CFIA-specific criteria into laboratory accreditation, while Japan distinguishes foreign laboratory reports accepted across export origins from those limited to exports from the laboratory's own country or region. ■ ■■■■■■■■■■ ■■■■■ ■■■■■■■ ■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■■ ■■■■■ ■■■■■■■■■ ■■■ ■■■■■■ ■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■ ■■ ■■■■■■■■■■■■ ■■ ■■■■■ ■■■■■■■■■■■■ ■■■■■■■ ■■ ■■■ ■■■■■■ ■■■■■■■ ■■■■■■■■■■■■

NATO represents a potential institutional foodservice channel, not demonstrated equipment procurement. ■■■■■■■■ ■■■■■ ■■■■ ■■■■■■ ■■■■■■■■■■ ■■ ■■■■ ■■■■■■■■■■■■■■■■ ■■■■■ ■■■■■■ ■■■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■■ ■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■ ■■■■■ ■■■ ■■■■■■■■■■ ■■ ■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■ ■■ ■■■■■■■■■ ■■■■■■■■ ■■■■ ■■■■■■■■■■ ■■■■■■■■ ■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■ ■■■■ ■■■■ ■■ ■■ ■ ■■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■ ■■ ■■■■■■■■■ ■■■■■■■■■■■■ The announced event does not establish an equipment award or a contractor's buying authority.

■■■■■ ■■■■■ ■■■■■■ ■■■■■■■ ■■■■ ■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■ ■■■ ■■■■ ■■■ ■■■■■■■■ Americas and Europe, Middle East & Africa organize broad commercial coverage; ASEAN, GCC, Australasia, Nordic, European Union, BRICS, G7, and NATO address different institutional relationships. They are non-additive analytical views, not separate markets that can be combined without reconciling the underlying geography and commercial activity.

Figure 25. Global Food Safety Testing Equipment Market Size, by Group, 2025 vs 2026 vs 2032

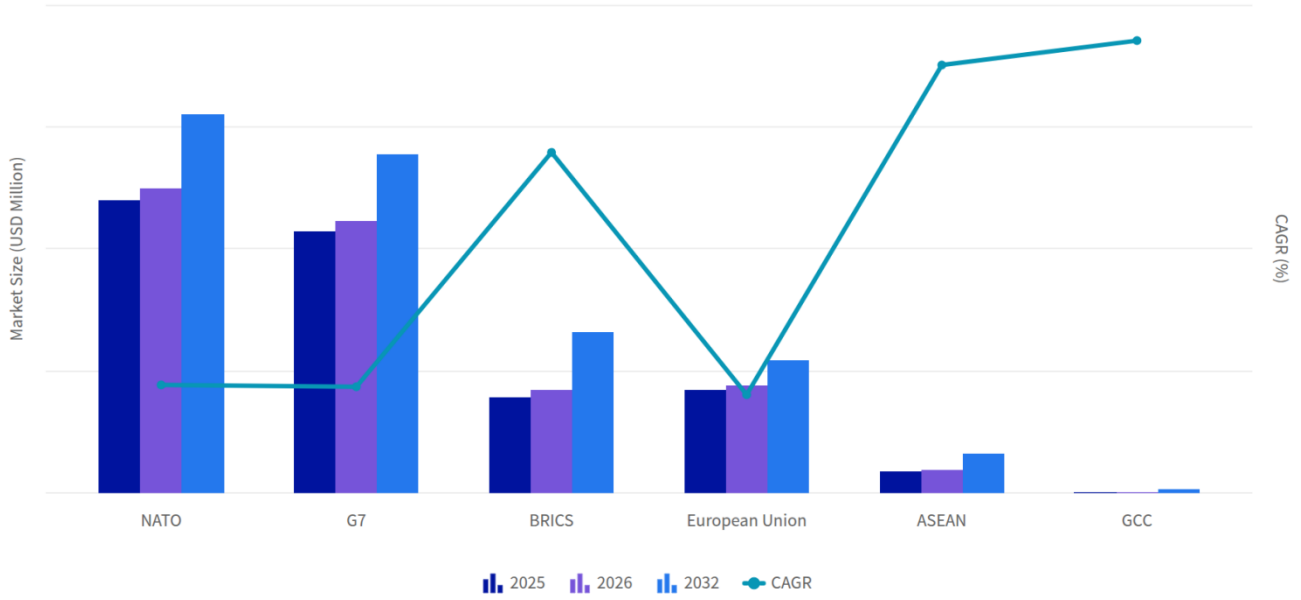

Table 286. Global Food Safety Testing Equipment Market Size, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
ASEAN	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
BRICS	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
European Union	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
G7	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
GCC	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
NATO	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Sources & Evidence

1. Compliance Order for All Laboratories - FSSAI, I/35118/2026

   · FSSAI's notified-laboratory obligations illustrate a national reporting and recognition relationship within the BRICS comparison. ([fssai.gov.in](https://www.fssai.gov.in/upload/advisories/2026/xx.xx/699855f2b69d3Compliance%20Order%20for%20All%20Laboratories.pdf))

2. WEEE Responsibilities

   · Your Europe describes registration and waste-management responsibilities for producers of covered electrical and electronic equipment, with destination-country arrangements. Specific instrument classification remains a prerequisite. ([europa.eu](https://europa.eu/youreurope/business/product-rules-compliance/recycling-waste-management/weee-responsibilities/index_en.htm))

3. Accreditation Requirements for Food & Environmental Laboratories - EIAC

   · EIAC's scheme supplements ISO/IEC xx.xx and requires applicable national and local legal compliance, supporting a distinction between shared GCC guidance and local laboratory obligations. ([eiac.gov.ae](https://eiac.gov.ae/wp-content/uploads/2025/xx.xx/EIAC-RQ-LB-xx.xx-Accreditation-Requirements-for-Food-Environmental-Laboratories.pdf))

4. CFIA Framework for Quality Management Oversight of Laboratories Conducting Testing in Areas Under the CFIA Mandate

   · Canadian food-laboratory accreditation arrangements incorporate CFIA criteria, supporting destination-specific acceptance scopes in the G7 comparison. ([inspection.canada.ca](https://inspection.canada.ca/en/food-safety-industry/food-chemistry-and-microbiology/laboratory-management/qmof))

5. Laboratórios Credenciados - Ministério da Agricultura e Pecuária

   · Brazil's demanded scopes and public selection illustrate a national institutional gate within the BRICS comparison. ([gov.br](https://www.gov.br/agricultura/pt-br/assuntos/defesa-agropecuaria/laboratorios-credenciados/laboratorio-credenciado))

6. Foreign Official Laboratories - Ministry of Health, Labour and Welfare

   · The Japanese register distinguishes acceptance across export origins from acceptance limited to exports from the laboratory's own country or region. ([mhlw.go.jp](https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/kenkou_iryou/shokuhin/yunyu_kanshi/index_00019.html))

7. Member Countries - Inter-American Network of Food Analysis Laboratories

   · INFAL comprises officially nominated national laboratories and describes country participation as voluntary. Its roster supports institutional discovery rather than collective procurement or automatic customer acceptance. ([rilaa.net](https://www.rilaa.net/en/paises-miembros))

8. Corporate Policies - Ishida

   · Ishida's Brexit statement describes a Netherlands distribution center established in 2020 and commitments directed to EU customers. It does not establish identical undertakings throughout EMEA. ([ishidaeurope.com](https://www.ishidaeurope.com/en/about-us/corporate/corporate-policies/))

9. Harmonisation of Standards in ASEAN

   · The ASEAN Trade Repository distinguishes categories of harmonized standards and advises confirmation of national adoption. This supports a conditional rather than automatic access simplification. ([atr.asean.org](https://atr.asean.org/read/harmonisation-of-standards-in-asean/xx.xx/))

10. GCC Guide for Control on Imported Foods

    · The GCC's 2015 guide describes an integrated, risk-based import-control direction while retaining competent national authorities. It is a historical food-trade reference, not evidence of one current instrument authorization. ([gcc-sg.org](https://gcc-sg.org/en/MediaCenter/DigitalLibrary/Documents/xx.xx.pdf))

11. Food Safety Standards - Chapter 3

    · FSANZ states that Chapter xx.xx food-safety standards apply to Australia only, supporting separate national applicability checks within Australasia. ([foodstandards.gov.au](https://www.foodstandards.gov.au/business/food-safety-standards))

12. Agriculture, Fisheries and Food Safety - European Free Trade Association

    · EFTA describes harmonized food-safety and official-control requirements under the EEA and identifies limits, including the absence of fully harmonized plant-health legislation. ([efta.int](https://www.efta.int/eea-relations-eu/policy-areas/free-movement-goods/agriculture-fisheries-and-food-safety))

13. Agricultural Research and Technology Collaboration Within BRICS Framework

    · India's July xx.xx 2025 government disclosure describes the BRICS Agricultural Research Platform as a virtual network supporting institutional cooperation. It does not establish an equipment order or common laboratory permission. ([pib.gov.in](https://www.pib.gov.in/PressReleasePage.aspx?PRID=xx.xx&lang=xx.xx®=xx.xx))

14. Konferencja NSPA - Dzień Branży Żywnościowej

    · Poland's April xx.xx 2026 notice advertised an NSPA pre-solicitation foodservices event and supplier-registration opportunity. It establishes announced engagement, not completed equipment procurement. ([gov.pl](https://www.gov.pl/web/rozwoj-technologia/konferencja-nspa---dni-branzy-zywnoscioweh))

15. Procurement Opportunities - NATO
    - NATO states that the respective procuring body evaluates bids case by case. This supports identifying the actual purchasing authority rather than treating NATO membership as equipment access. ([nato.int](https://www.nato.int/en/work-with-us/business-and-project-opportunities/procurement-opportunities))
16. Processing & Marketing - Food and Beverage Manufacturing
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
17. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
18. Mettler-Toledo International Inc. - 2025 Form 10-K
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
19. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
    - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
    - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.

20. Agilent Technologies - 2017 Annual Report
- Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

21. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
- Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
- Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
- Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

22. Agilent Technologies - Fiscal 2025 Annual Report
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.

23. Agilent Technologies - Q1 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

24. Waters Corporation - 2025 Annual Report
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.

25. Thermo Fisher Scientific Inc. - 2025 Form 10-K
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

26. bioMérieux - 2025 Financial Results
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.

27. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.
28. Testo - Annual Press Conference, January 23, 2025
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
29. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
30. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
31. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
32. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

15.1. NATO

Table 287. NATO Food Safety Testing Equipment Market, by Country growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Albania	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Belgium	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bulgaria	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Croatia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Czech Republic	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Denmark	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Estonia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Finland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Greece	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hungary	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Iceland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latvia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Lithuania	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Luxembourg	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Montenegro	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Netherlands	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North Macedonia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Norway	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Poland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Portugal	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Romania	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Slovakia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Slovenia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sweden	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 287 - continued

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Turkey	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 288. NATO Food Safety Testing Equipment Market Size, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Albania	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Belgium	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bulgaria	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Croatia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Czech Republic	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Denmark	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Estonia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Finland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Greece	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hungary	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Iceland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latvia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Lithuania	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Luxembourg	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Montenegro	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Netherlands	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
North Macedonia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Norway	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Poland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 288 - continued

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portugal	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Romania	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Slovakia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Slovenia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sweden	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Turkey	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 289. NATO Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 290. NATO Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 291. NATO Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 292. NATO Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 293. NATO Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 294. NATO Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 295. NATO Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 296. NATO Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 297. NATO Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.

19. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: National food/drink turnover and value added constrain the activity score; no equipment percentage is directly reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: National food/drink turnover and value added constrain the activity score; no equipment percentage is directly reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Bulgarian turnover/value-added inputs for the shared commercial activity model.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Bulgarian turnover/value-added inputs for the shared commercial activity model.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Croatian turnover/value-added inputs for the shared commercial activity model.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Croatian turnover/value-added inputs for the shared commercial activity model.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Czech food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Czech food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Danish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Danish food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Estonian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Estonian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Finnish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Finnish food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Greek food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Greek food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Hungarian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Hungarian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Latvian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Latvian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Lithuanian food-industry turnover/value-added inputs.

20. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
21. US International Trade Administration - Turkey Agriculture, January 29, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes Turkey's formal food-processing and foodservice customer roles and a population reference of xx.xx.7m. These constrain the explicit throughput-equivalent assumption, not observed equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes Turkey's formal food-processing and foodservice customer roles and a population reference of xx.xx.7m. These constrain the explicit throughput-equivalent assumption, not observed equipment spending.
22. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
23. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
24. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

25. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
26. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))
27. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

28. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

29. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
30. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

31. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
32. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
33. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
34. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

35. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
36. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
37. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
38. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
39. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

40. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
41. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
42. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
43. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
44. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

45. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
46. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
47. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
48. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.

49. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
50. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
51. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
52. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
53. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.

54. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
55. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
56. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
57. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
58. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

59. Frequently Asked Questions - Wholesale - U.S. Census Bureau

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

60. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

61. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

62. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

63. Food and Beverage Resource Guide for Commercial Food Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

64. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
65. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

66. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
67. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
68. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
69. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

15.2. G7

Table 298. G7 Food Safety Testing Equipment Market, by Country growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 299. G7 Food Safety Testing Equipment Market Size, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 300. G7 Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 301. G7 Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 302. G7 Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 303. G7 Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 304. G7 Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 305. G7 Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 306. G7 Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 307. G7 Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 308. G7 Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
19. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
20. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
21. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
22. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.

23. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
24. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
25. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

26. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
27. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))
28. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

29. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

30. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
31. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

32. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
33. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
34. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
35. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

36. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
37. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
38. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
39. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
40. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

41. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
42. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
43. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
44. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
45. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

46. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
47. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
48. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
49. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.

50. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
51. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
52. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
53. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
54. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.

55. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
56. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
57. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
58. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
59. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

60. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

61. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

62. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

63. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

64. Food and Beverage Resource Guide for Commercial Food Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

65. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
66. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

67. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
68. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
69. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
70. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

15.3. European Union

Table 309. European Union Food Safety Testing Equipment Market, by Country growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Austria	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Belgium	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bulgaria	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Croatia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Cyprus	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Czech Republic	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Denmark	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Estonia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Finland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Greece	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hungary	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ireland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latvia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Lithuania	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Luxembourg	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Malta	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Netherlands	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Poland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Portugal	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Romania	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Slovakia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Slovenia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sweden	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 310. European Union Food Safety Testing Equipment Market Size, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Austria	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Belgium	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bulgaria	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Croatia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Cyprus	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Czech Republic	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Denmark	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Estonia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Finland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Greece	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hungary	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ireland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Latvia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Lithuania	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Luxembourg	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Malta	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Netherlands	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Poland	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Portugal	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Romania	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Slovakia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Slovenia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sweden	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 311. European Union Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 312. European Union Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 313. European Union Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 314. European Union Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 315. European Union Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 316. European Union Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 317. European Union Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 318. European Union Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 319. European Union Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: 2023 national turnover and value added support the modeled score xx.xx*T+xx.xx*VA and its forecast starting weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: 2023 national turnover and value added support the modeled score xx.xx*T+xx.xx*VA and its forecast starting weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: National food/drink turnover and value added constrain the activity score; no equipment percentage is directly reported.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: National food/drink turnover and value added constrain the activity score; no equipment percentage is directly reported.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Bulgarian turnover/value-added inputs for the shared commercial activity model.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Bulgarian turnover/value-added inputs for the shared commercial activity model.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Croatian turnover/value-added inputs for the shared commercial activity model.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Croatian turnover/value-added inputs for the shared commercial activity model.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Cypriot turnover/value-added inputs, not a local equipment-sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Cypriot turnover/value-added inputs, not a local equipment-sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Czech food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Czech food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Danish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Danish food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Estonian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Estonian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Finnish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Finnish food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Greek food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Greek food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Hungarian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Hungarian food-industry turnover/value-added inputs.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Irish food-industry turnover/value-added inputs.

19. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
20. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
21. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

22. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
23. Digital Food Safety Management with testo Saveris Food
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

24. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
25. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

26. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
27. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
28. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
29. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

30. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
31. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
32. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
33. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
34. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

35. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
36. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
37. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
38. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
39. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

40. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
41. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
42. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
43. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

44. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
45. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
46. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
47. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
48. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

49. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
50. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
51. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
52. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
53. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

54. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

55. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

56. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

57. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

58. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

59. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

60. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
61. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

62. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
63. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
64. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
65. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

15.4. BRICS

Table 320. BRICS Food Safety Testing Equipment Market, by Country growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 321. BRICS Food Safety Testing Equipment Market Size, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Africa	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 322. BRICS Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 323. BRICS Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 324. BRICS Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 325. BRICS Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 326. BRICS Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 327. BRICS Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 328. BRICS Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 329. BRICS Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 330. BRICS Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
19. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
20. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
21. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
22. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

23. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
24. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))
25. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

26. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

27. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
28. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

29. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
30. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
31. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
32. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

33. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
34. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
35. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
36. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
37. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

38. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
39. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
40. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
41. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
42. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

43. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
44. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
45. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
46. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

47. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
48. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
49. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
50. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
51. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

52. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
53. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
54. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
55. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
56. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

57. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

58. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

59. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

60. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

61. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

62. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

63. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
64. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

65. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
66. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
67. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
68. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

15.5. ASEAN

Table 331. ASEAN Food Safety Testing Equipment Market, by Country growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Brunei	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Cambodia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Indonesia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Lao People's Democratic Republic	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Malaysia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Myanmar	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Philippines	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Singapore	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thailand	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Vietnam	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 332. ASEAN Food Safety Testing Equipment Market Size, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Brunei	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Cambodia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Indonesia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Lao People's Democratic Republic	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Malaysia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Myanmar	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Philippines	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Singapore	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thailand	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Vietnam	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 333. ASEAN Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 334. ASEAN Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 335. ASEAN Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 336. ASEAN Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 337. ASEAN Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 338. ASEAN Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 339. ASEAN Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 340. ASEAN Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 341. ASEAN Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
19. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
20. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

21. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

22. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

23. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
24. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

25. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
26. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
27. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
28. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

29. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
30. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
31. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
32. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
33. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

34. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
35. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
36. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
37. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
38. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

39. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
40. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
41. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
42. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

43. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
44. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
45. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
46. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
47. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

48. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
49. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
50. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
51. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
52. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

53. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

54. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

55. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

56. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

57. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

58. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

59. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
60. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

61. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
62. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
63. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
64. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

15.6. GCC

Table 342. GCC Food Safety Testing Equipment Market, by Country growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Bahrain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Kuwait	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Oman	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Qatar	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Saudi Arabia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Arab Emirates	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 343. GCC Food Safety Testing Equipment Market Size, by Group, 2017-2040 (USD Million)

Group	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Bahrain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Kuwait	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Oman	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Qatar	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Saudi Arabia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Arab Emirates	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx

Table 344. GCC Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 345. GCC Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 346. GCC Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 347. GCC Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 348. GCC Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 349. GCC Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 350. GCC Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 351. GCC Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 352. GCC Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. USDA Foreign Agricultural Service - Saudi Arabia Food Processing Ingredients, April 6, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a developing processing customer base and a cumulative broad-sector investment ambition. The model explicitly does not treat that ambition as annual food-safety equipment expenditure.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a developing processing customer base and a cumulative broad-sector investment ambition. The model explicitly does not treat that ambition as annual food-safety equipment expenditure.
19. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
20. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
21. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

22. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

23. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

24. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
25. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

26. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
27. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
28. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
29. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

30. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
31. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
32. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
33. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
34. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

35. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
36. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
37. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
38. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
39. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

40. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
41. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
42. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
43. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

44. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
45. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
46. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
47. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
48. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

49. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
50. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
51. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
52. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
53. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

54. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

55. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

56. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

57. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

58. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

59. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

60. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
61. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

62. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
63. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
64. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
65. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16. Food Safety Testing Equipment Market, by Country

In the United States, retail and foodservice equipment claims require attention to the adopting jurisdiction. ▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪ ▪▪ ▪ ▪▪▪▪▪ ▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ A vendor's reference to the FDA model does not independently establish acceptance at every site.

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India adds a prescribed reporting deliverable to the institutional buying decision. FSSAI's February xx.xx 2026 order directs notified laboratories to remain within NABL accreditation scope, use prescribed report formats, and upload reports to InFoLNet without delay. ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪

Japan can place equipment-related activity outside the importing country when accepted foreign laboratory reports satisfy the relevant requirement. MHLW's register distinguishes laboratories with different export-origin coverage. ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪ ▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪

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connected system. Buyers should identify their category and accepted documentation arrangement before selecting hardware or associated subscriptions.

Singapore's documented private-laboratory model separates the food business needing evidence from the organization operating equipment. ■■■■■ ■■■■■■■ ■■■■ ■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■■■■ ■■■■ ■■■■■■ ■■■ ■■■■ ■■■■■■ ■■ ■■■ ■■■■■■ For an individual transaction, recognition scope, service availability, and the actual purchase authorization must still be established.

Figure 26. Global Food Safety Testing Equipment Market Size, by Country, 2025 vs 2032 (%)

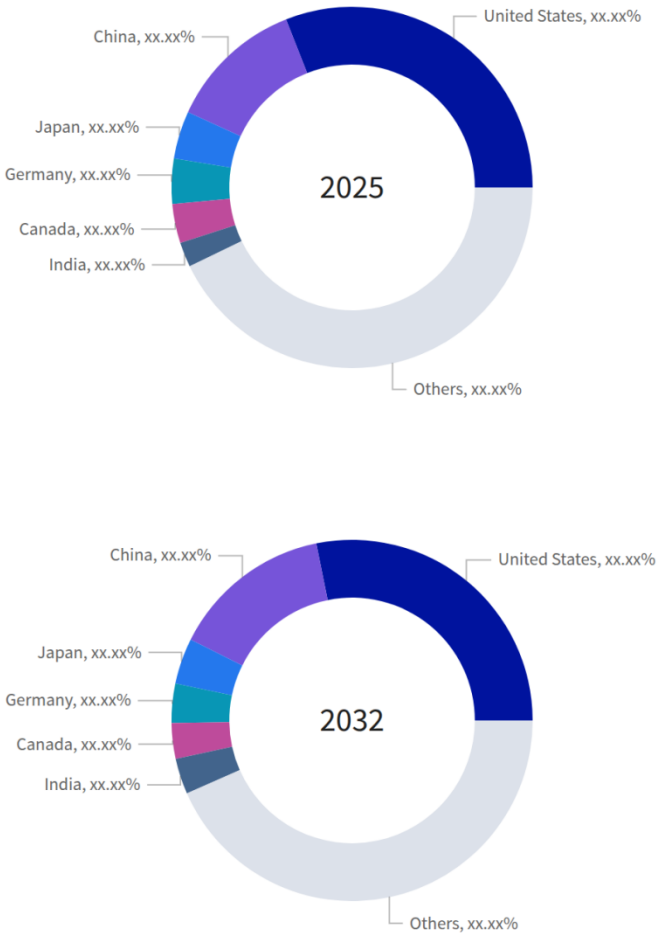

Figure 27. Global Food Safety Testing Equipment Market Size, by Country, 2025 vs 2026 vs 2032

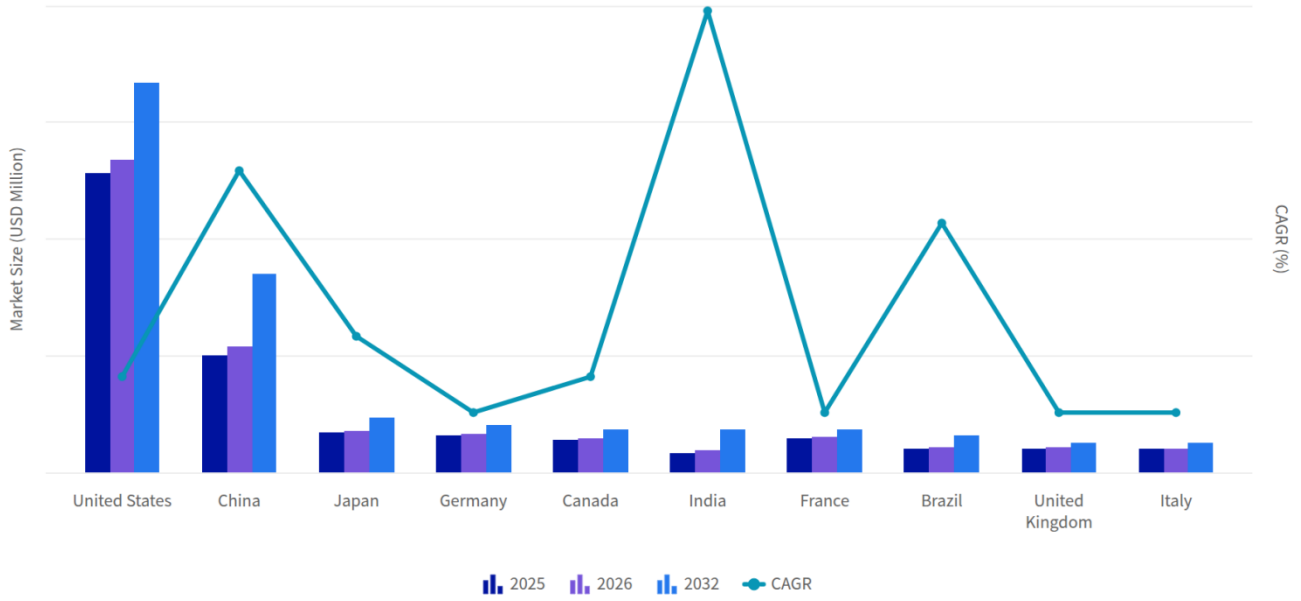

Table 353. Global Food Safety Testing Equipment Market, by Country growth contribution, 2025-2032

Category	2025 value (USD Million)	2032 value (USD Million)	Added value (USD Million)	2025 share (%)	2032 share (%)	Change (pp)	Growth share (%)	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Unallocated / remaining scope	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Scope total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 354. Global Food Safety Testing Equipment Market Size, by Country, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Brazil	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Canada	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
China	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
France	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Germany	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
India	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Italy	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Japan	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mexico	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Russia	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
South Korea	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spain	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United Kingdom	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
United States	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Others	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Ramping Up Singapore's Food Testing Capabilities
   · The Singapore account identifies private laboratory services for industry and regulatory needs, supporting separation of the evidence customer from the equipment operator. ([sfa.gov.sg](https://www.sfa.gov.sg/food-for-thought/article/detail/ramping-up-singapore%27s-food-testing-capabilities))
2. Compliance Order for All Laboratories - FSSAI, I/35118/2026
   · FSSAI's February xx.xx 2026 order requires notified laboratories to stay within NABL accreditation scope, follow prescribed report formats, and upload reports to InFoLNet without delay. Equipment connectivity does not independently discharge these obligations. ([fssai.gov.in](https://www.fssai.gov.in/upload/advisories/2026/xx.xx/699855f2b69d3Compliance%20Order%20for%20All%20Laboratories.pdf))
3. FDA Food Code
   · FDA describes the Food Code as a model for regulatory jurisdictions developing retail and foodservice rules. A model reference does not independently establish identical local applicability. ([fda.gov](https://www.fda.gov/food/retail-food-protection/fda-food-code))

4. Laboratórios Credenciados - Ministério da Agricultura e Pecuária
   - MAPA limits accreditation to demanded reference activities and uses public selection, supporting recognition verification before equipment commitment for official-scope expansion. ([gov.br](https://www.gov.br/agricultura/pt-br/assuntos/defesa-agropecuaria/laboratorios-credenciados/laboratorio-credenciado))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
5. Foreign Official Laboratories - Ministry of Health, Labour and Welfare
   - The register provides distinct coverage categories that an exporter must match to its chosen laboratory relationship. ([mhlw.go.jp](https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/kenkou_iryou/shokuhin/yunyu_kanshi/index_00019.html))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
6. 检验检测机构资质认定“一单一库”常见问题解答 - SAMR
   - SAMR's May xx.xx 2026 guidance explains the framework effective June xx.xx 2026, including activities outside CMA requirements, restrictions on CMA marking, separate statutory qualifications, and transitional contracts. The proposed food-testing activity still requires a scope check. ([samr.gov.cn](https://www.samr.gov.cn/rzjgs/xczl/art/2026/art_b1a54b8398da4f03a910ad0f8c1c2afb.html))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.
7. Foreign Official Laboratories - Acceptance Guidance
   - MHLW's foreign-laboratory guidance describes accepted foreign results and excludes items whose sanitary condition can change during transport, including bacteria and mycotoxins. It supports a bounded offshore fulfillment choice. ([mhlw.go.jp](https://www.mhlw.go.jp/english/topics/importedfoods/dl/xx.xx-xx.xx.pdf))
8. Standard 3.2.2A - Food Safety Management Tools
   - FSANZ describes Standard xx.xx.2A as applying to specified Australian foodservice, catering, and retail activities, with category-dependent supervision, training, and evidence requirements. It does not prescribe a universal connected-equipment purchase. ([foodstandards.gov.au](https://www.foodstandards.gov.au/business/food-safety/overview-food-safety-management-tools))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.

9. Processing & Marketing - Food and Beverage Manufacturing
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
10. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
11. Mettler-Toledo International Inc. - 2025 Form 10-K
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
12. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
    - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
    - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
    - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
    - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
    - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
    - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
    - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
    - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.

13. Agilent Technologies - 2017 Annual Report
- Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

14. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
- Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
- Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
- Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.

15. Agilent Technologies - Fiscal 2025 Annual Report
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.

16. Agilent Technologies - Q1 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.

17. Waters Corporation - 2025 Annual Report
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.

18. Thermo Fisher Scientific Inc. - 2025 Form 10-K
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

19. bioMérieux - 2025 Financial Results
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.

20. Neogen Corporation - Fiscal 2025 Annual Report
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

21. Testo - Annual Press Conference, January 23, 2025
- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.

22. Anritsu Integrated Report 2025
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.

23. Eurofins Scientific - FY 2025 Results Presentation
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.

24. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.

25. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
- Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
- Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.

26. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.

27. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.

28. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.

29. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.

30. Defra - Food statistics in your pocket, manufacturing businesses
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.

31. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.

32. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.

33. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
34. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.

16.1. United States

Table 355. United States Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
United States	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 356. United States Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 357. United States Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 358. United States Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 359. United States Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 360. United States Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 361. United States Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 362. United States Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 363. United States Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 364. United States Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food/beverage manufacturing establishments in 2022, constraining the industrial equipment customer universe used in the national working score.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. FDA - Laboratory Accreditation for Analyses of Foods Program and Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: LAAF covers specified testing circumstances and has staged capacity/compliance determinations. It constrains the model against applying a universal US equipment-purchase requirement.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
19. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
20. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.

21. PR18666 - 39903-251283 Percival Incubators - Contract History

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

22. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

23. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

24. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
25. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

26. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
27. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
28. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
29. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

30. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
31. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
32. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
33. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
34. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

35. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
36. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
37. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
38. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
39. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

40. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
41. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
42. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
43. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.

44. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
45. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
46. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
47. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
48. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.

49. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
50. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
51. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
52. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
53. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

54. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

55. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation. ([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

56. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales. ([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

57. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

58. Food and Beverage Resource Guide for Commercial Food Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

59. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
60. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

61. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
62. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
63. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
64. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.2. China

Table 365. China Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
China	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 366. China Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 367. China Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 368. China Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 369. China Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 370. China Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 371. China Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 372. China Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 373. China Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 374. China Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. USDA Foreign Agricultural Service - China Food Processing Ingredients Annual, April 1, 2026
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Attributes 2025 food/agricultural processing revenue and approximately xx.xx registered companies to Chinese public authorities. Broad sector coverage requires the disclosed modeled scope and equipment-intensity reductions.

19. SAMR - Frequently asked questions on the inspection and testing institution one-list, one-database framework
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: May xx.xx 2026 guidance describes the scope-specific framework effective June xx.xx 2026. The model applies no blanket CMA-driven equipment uplift.

20. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

21. Products and Accessories - Microbiology | INTERSCIENCE
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.

22. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))
23. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
24. Digital Food Safety Management with testo Saveris Food
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

25. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
26. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

27. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
28. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
29. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
30. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

31. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
32. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
33. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
34. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
35. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

36. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
37. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
38. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
39. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
40. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

41. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
42. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
43. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
44. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

45. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
46. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
47. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
48. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
49. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

50. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
51. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
52. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
53. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
54. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

55. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

56. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

57. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

58. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

59. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

60. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

61. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
62. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

63. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
64. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
65. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
66. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.3. Japan

Table 375. Japan Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Japan	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 376. Japan Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 377. Japan Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 378. Japan Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 379. Japan Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 380. Japan Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 381. Japan Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 382. Japan Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 383. Japan Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 384. Japan Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. USDA Foreign Agricultural Service - Japan Food Processing Ingredients Annual, April 1, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports about USD xx.xx of 2025 food processing and a xx.xx% contraction. This anchors the industrial activity score and challenges an unconditional purchasing-surge assumption.
19. Japan Ministry of Health, Labour and Welfare - Foreign Official Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists foreign laboratories with differing accepted-report coverage. It supports retaining buyer/equipment location rather than attributing all associated equipment to Japan's food-import destination.
20. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

21. Products and Accessories - Microbiology | INTERSCIENCE

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.

22. PR18666 - 39903-251283 Percival Incubators - Contract History

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

23. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

24. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

25. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
26. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

27. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
28. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
29. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
30. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

31. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
32. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
33. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
34. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
35. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

36. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
37. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
38. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
39. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
40. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

41. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
42. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
43. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
44. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

45. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
46. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
47. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
48. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
49. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

50. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
51. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
52. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
53. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
54. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

55. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
56. Frequently Asked Questions - Wholesale - U.S. Census Bureau
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

57. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

58. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

59. Mettler-Toledo Standard Terms and Conditions for Sales and Service

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

60. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

61. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
62. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

63. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
64. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
65. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
66. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.4. Germany

Table 385. Germany Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Germany	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 386. Germany Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 387. Germany Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 388. Germany Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 389. Germany Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 390. Germany Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 391. Germany Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 392. Germany Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 393. Germany Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 394. Germany Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides German food-industry turnover/value-added inputs.
19. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
20. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
21. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

22. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

23. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

24. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
25. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

26. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
27. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
28. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
29. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

30. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
31. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
32. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
33. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
34. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

35. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
36. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
37. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
38. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
39. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

40. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
41. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
42. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
43. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

44. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
45. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
46. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
47. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
48. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

49. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
50. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
51. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
52. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
53. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

54. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

55. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

56. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

57. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

58. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

59. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

60. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
61. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

62. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
63. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
64. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
65. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.5. France

Table 395. France Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
France	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 396. France Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 397. France Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 398. France Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 399. France Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 400. France Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 401. France Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 402. France Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 403. France Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 404. France Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. **Processing & Marketing - Food and Beverage Manufacturing**

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides French food-industry turnover/value-added inputs.
19. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
20. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
21. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

22. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

23. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

24. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
25. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

26. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
27. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
28. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
29. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

30. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
31. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
32. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
33. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
34. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

35. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
36. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
37. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
38. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
39. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

40. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
41. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
42. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
43. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

44. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
45. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
46. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
47. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
48. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

49. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
50. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
51. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
52. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
53. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

54. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

55. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

56. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

57. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

58. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

59. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

60. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
61. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

62. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
63. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
64. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
65. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.6. Canada

Table 405. Canada Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Canada	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 406. Canada Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 407. Canada Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 408. Canada Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 409. Canada Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 410. Canada Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 411. Canada Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 412. Canada Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 413. Canada Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 414. Canada Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. USDA Foreign Agricultural Service - Canada Food Processing Ingredients Annual, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes approximately xx.xx Canadian food/beverage processing establishments, constraining the customer-pool proxy. Mean activity, equipment intensity and forecast change remain modeled.
19. CFIA - Framework for Quality Management Oversight of Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes separate Canadian laboratory oversight and recognition arrangements; no quantitative equipment-acquisition effect is inferred.
20. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

21. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
22. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))
23. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

24. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

25. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
26. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

27. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
28. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
29. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
30. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

31. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
32. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
33. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
34. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
35. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

36. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
37. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
38. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
39. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
40. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

41. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
42. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
43. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
44. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

45. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
46. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
47. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
48. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
49. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

50. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
51. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
52. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
53. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
54. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

55. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

56. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

57. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

58. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

59. Mettler-Toledo Standard Terms and Conditions for Sales and Service

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

60. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.

· Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

· Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

61. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
62. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

63. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
64. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
65. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
66. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.7. United Kingdom

Table 415. United Kingdom Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
United Kingdom	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 416. United Kingdom Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 417. United Kingdom Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 418. United Kingdom Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 419. United Kingdom Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 420. United Kingdom Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 421. United Kingdom Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 422. United Kingdom Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 423. United Kingdom Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 424. United Kingdom Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. Defra - Food statistics in your pocket, manufacturing businesses
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official 2025 employer food/drink manufacturer counts constrain the UK commercial buyer scale; they do not verify the assumed equipment-activity score.
19. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
20. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
21. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

22. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

23. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

24. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
25. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

26. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
27. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
28. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
29. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

30. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
31. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
32. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
33. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
34. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

35. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
36. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
37. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
38. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
39. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

40. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
41. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
42. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
43. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

44. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
45. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
46. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
47. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
48. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

49. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
50. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
51. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
52. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
53. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

54. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

55. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

56. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

57. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

58. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

59. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

60. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
61. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

62. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
63. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
64. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
65. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.8. Italy

Table 425. Italy Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Italy	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 426. Italy Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 427. Italy Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 428. Italy Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 429. Italy Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 430. Italy Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 431. Italy Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 432. Italy Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 433. Italy Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 434. Italy Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. **Processing & Marketing - Food and Beverage Manufacturing**

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Italian food-industry turnover/value-added inputs.
19. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
20. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
21. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

22. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

23. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

24. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
25. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

26. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
27. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
28. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
29. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

30. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
31. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
32. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
33. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
34. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

35. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
36. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
37. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
38. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
39. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

40. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
41. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
42. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
43. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

44. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
45. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
46. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
47. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
48. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

49. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
50. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
51. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
52. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
53. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

54. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

55. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

56. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

57. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

58. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

59. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

60. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
61. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

62. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
63. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
64. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
65. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.9. Brazil

Table 435. Brazil Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Brazil	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 436. Brazil Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 437. Brazil Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 438. Brazil Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 439. Brazil Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 440. Brazil Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 441. Brazil Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 442. Brazil Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 443. Brazil Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 444. Brazil Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. USDA Foreign Agricultural Service - Brazil Food Processing Ingredients Annual, March 31, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 food-processing revenue of USD xx.xx attributed to ABIA. It anchors the food-industry activity proxy, not equipment-market revenue or a future share.
19. Brazil Ministry of Agriculture - Accredited Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes accredited third-party laboratories and demanded activities, constraining the model against equating industrial processing growth or equipment acquisition with expanded official recognition.
20. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))

21. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
22. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))
23. Testo - Annual Press Conference, February 19, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

24. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

25. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
26. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

27. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
28. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
29. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
30. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

31. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
32. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
33. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
34. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
35. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

36. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
37. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
38. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
39. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
40. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

41. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
42. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
43. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
44. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

45. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
46. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
47. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
48. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
49. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

50. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
51. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
52. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
53. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
54. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

55. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

56. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

57. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

58. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

59. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

60. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

61. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
62. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

63. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
64. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
65. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
66. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.10. Spain

Table 445. Spain Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Spain	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 446. Spain Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 447. Spain Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 448. Spain Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 449. Spain Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 450. Spain Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 451. Spain Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 452. Spain Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 453. Spain Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 454. Spain Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. FoodDrinkEurope Data & Trends - National food and drink industry statistics, 2023
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Provides Spanish food-industry turnover/value-added inputs.
19. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
20. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
21. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

22. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

23. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

24. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
25. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

26. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
27. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
28. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
29. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

30. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
31. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
32. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
33. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
34. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

35. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
36. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
37. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
38. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
39. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

40. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
41. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
42. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
43. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

44. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
45. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
46. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
47. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
48. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

49. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
50. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
51. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
52. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
53. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

54. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

55. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

56. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

57. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

58. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

59. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

60. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
61. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

62. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
63. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
64. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
65. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.11. India

Table 455. India Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
India	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 456. India Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 457. India Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 458. India Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 459. India Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 460. India Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 461. India Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 462. India Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 463. India Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 464. India Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
19. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
20. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

21. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

22. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

23. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
24. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

25. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
26. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
27. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
28. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

29. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
30. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
31. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
32. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
33. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

34. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
35. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
36. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
37. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
38. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

39. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
40. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
41. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
42. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

43. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
44. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
45. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
46. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
47. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

48. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
49. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
50. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
51. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
52. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

53. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

54. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

55. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

56. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

57. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

58. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

59. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
60. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

61. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
62. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
63. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
64. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.12. South Korea

Table 465. South Korea Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
South Korea	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 466. South Korea Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 467. South Korea Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 468. South Korea Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 469. South Korea Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 470. South Korea Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 471. South Korea Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 472. South Korea Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 473. South Korea Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 474. South Korea Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
19. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
20. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

21. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

22. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

23. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
24. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

25. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
26. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
27. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
28. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

29. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
30. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
31. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
32. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
33. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

34. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
35. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
36. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
37. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
38. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

39. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
40. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
41. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
42. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

43. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
44. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
45. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
46. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
47. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

48. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
49. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
50. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
51. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
52. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

53. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

54. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

55. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

56. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

57. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

58. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

59. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
60. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

61. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
62. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
63. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
64. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.13. Russia

Table 475. Russia Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Russia	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 476. Russia Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 477. Russia Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 478. Russia Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 479. Russia Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 480. Russia Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 481. Russia Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 482. Russia Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 483. Russia Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 484. Russia Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
19. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
20. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

21. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

22. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

23. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
24. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

25. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
26. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
27. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
28. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

29. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
30. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
31. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
32. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
33. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

34. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
35. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
36. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
37. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
38. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

39. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
40. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
41. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
42. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

43. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
44. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
45. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
46. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
47. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

48. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
49. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
50. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
51. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
52. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

53. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

54. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

55. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

56. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

57. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

58. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

59. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
60. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

61. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
62. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
63. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
64. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.14. Australia

Table 485. Australia Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Australia	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 486. Australia Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 487. Australia Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 488. Australia Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 489. Australia Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 490. Australia Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 491. Australia Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 492. Australia Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 493. Australia Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 494. Australia Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. Food Standards Australia New Zealand - Standard 3.2.2A Food safety management tools
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes category-dependent foodservice, catering and retail obligations. It constrains the forecast against a universal connected-hardware acquisition assumption.
19. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
20. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
21. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

22. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

23. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

24. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
25. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

26. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
27. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
28. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
29. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

30. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
31. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
32. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
33. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
34. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

35. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
36. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
37. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
38. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
39. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

40. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
41. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
42. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
43. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

44. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
45. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
46. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
47. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
48. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

49. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
50. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
51. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
52. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
53. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

54. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

55. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence.
([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

56. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

57. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

58. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

59. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

60. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
61. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

62. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
63. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
64. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
65. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

16.15. Mexico

Table 495. Mexico Food Safety Testing Equipment Market Size, 2017-2040 (USD Million)

Country	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Mexico	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 496. Mexico Food Safety Testing Equipment Market Size, by Equipment Type, 2017-2040 (USD Million)

Equipment Type	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Analytical Instruments & Test Readers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Product Safety Inspection Systems	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Safety-Condition Measurement & Monitoring Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sample Preparation & Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Sampling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Test Incubation & Culture-Handling Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 497. Mexico Food Safety Testing Equipment Market Size, by Technology Platform, 2017-2040 (USD Million)

Technology Platform	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Affinity & Biochemical Assay Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Bioluminescence & Chemiluminescence	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Chromatography & Electrophoresis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Culture-Based Microbiology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Electrochemical Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Flow Cytometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mass Spectrometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Mechanical & Fluidic Sample Handling	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Metal Detection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Nucleic Acid Amplification & Sequencing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Optical Imaging & Machine Vision	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Property Metrology	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiometric Analysis	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Spectroscopy & Photometry	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Thermal Sample Conditioning	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
X-Ray Imaging	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 498. Mexico Food Safety Testing Equipment Market Size, by Nucleic Acid Amplification & Sequencing, 2017-2040 (USD Million)

Nucleic Acid Amplification & Sequencing	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
DNA Sequencing Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Isothermal Amplification Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
PCR Platforms	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 499. Mexico Food Safety Testing Equipment Market Size, by Testing Objective, 2017-2040 (USD Million)

Testing Objective	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Chemical Contaminant and Residue Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Allergen Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Hygiene Verification	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Microbiological Safety Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Physical Contaminant Inspection	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Preventive Safety-Condition Monitoring	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Radiological Contamination Testing	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 500. Mexico Food Safety Testing Equipment Market Size, by End User, 2017-2040 (USD Million)

End User	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Academic and Research Institutions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Manufacturers and Packers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Distribution and Logistics Businesses	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Retailers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Material Manufacturers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Foodservice Operators	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Government Food-Control Organizations	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Independent Testing Laboratories	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Primary Food Producers	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 501. Mexico Food Safety Testing Equipment Market Size, by Deployment Configuration, 2017-2040 (USD Million)

Deployment Configuration	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Portable Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Production-Line-Integrated Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Stationary Standalone Equipment	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 502. Mexico Food Safety Testing Equipment Market Size, by Sales Channel, 2017-2040 (USD Million)

Sales Channel	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agent- and Broker-Mediated Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Direct Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Distributor and Reseller Sales	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 503. Mexico Food Safety Testing Equipment Market Size, by Tested Matrix, 2017-2040 (USD Million)

Tested Matrix	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Agricultural, Ingredient, and Process Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food and Beverage Products and Ingredients	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Chain Environments	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food-Contact Materials and Articles	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Table 504. Mexico Food Safety Testing Equipment Market Size, by Food and Beverage Products and Ingredients, 2017-2040 (USD Million)

Food and Beverage Products and Ingredients	2017	2024	2025	2026	2027	2032	2040	CAGR (%)
Cereals and Bakery Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Confectionery and Sweeteners	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Dairy Products and Alternatives	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Edible Ices	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Eggs and Egg Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fats, Oils, and Fat Emulsions	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fish and Seafood Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Food Additives and Processing Aids	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Fruits, Vegetables, Nuts, and Seeds	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Meat and Poultry Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Non-Dairy Beverages and Packaged Drinking Water	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Prepared Meals and Composite Dishes	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Ready-to-Eat Savory Snacks	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Salt, Spices, Soups, Sauces, Salads, and Protein Products	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Special Dietary Foods and Supplements	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx
Total	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**	**xx.xx**

Sources & Evidence

1. Processing & Marketing - Food and Beverage Manufacturing

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports xx.xx US food and beverage manufacturing establishments in 2022. This constrains the scale of the industrial customer universe but is not a global equipment-purchasing census.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial purchaser scale without establishing global equipped-site counts.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx US food and beverage manufacturing establishments in 2022; constrains industrial customer scale, not global equipment sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Dairy represented xx.xx% of 2021 US manufacturing sales in this broader food-and-beverage dataset; used only as regional activity calibration.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Grain and oilseeds represented xx.xx% of sales; this combined category requires an explicit oils-versus-cereals crosswalk.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The combined grain/oilseed activity anchor does not measure bakery equipment spending; category coverage and equipment intensity remain modeled.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Meat processing represented xx.xx% of sales, including slaughter, processing and rendering; broader scope prevents direct copying into equipment share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Beverages represented xx.xx% of sales; provides a regional activity anchor rather than an equipment-market observation.

2. Review of Allergen Analytical Testing Methodologies: Measurement Parameters and Sensitivity of Methods

- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separates hardware investment from consumables, testing fees, maintenance and other laboratory costs.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports quote-based hardware costs of approximately GBP xx.xx for ELISA instrumentation, GBP xx.xx for PCR hardware and upwards of GBP xx.xx for mass-spectrometry hardware. These constrain equipment-cost tiers, not global average selling prices.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The cost comparison assumes existing common preparation assets, supporting separate equipment accounting and a conditional reuse premise rather than automatic whole-laboratory replacement.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Existing incubation assets are distinguished from additional analytical hardware investment; this supports modular purchasing, not a measured incubation sales weight.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based hardware tiers of approximately GBP xx.xx GBP xx.xx and upwards of GBP xx.xx constrain reader-versus-capital-instrument valuation; they are not global 2025 average prices. ([science.food.gov.uk](https://science.food.gov.uk/article/xx.xx.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Quote-based mass-spectrometry hardware investment constrains relative capital intensity; it is not a global ASP or platform-sales observation. Used as a base-model and forecast valuation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PCR hardware is costed separately from consumables and testing fees, supporting the molecular equipment-only valuation bridge.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The PCR hardware-cost tier informs relative equipment values; application-specific method counts are not used as sales weights.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: ELISA instrumentation provides a lower-cost reader reference for the broader affinity/biochemical model, without measuring its non-immunological portion.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Quote-based PCR hardware cost of approximately GBP xx.xx provides a reader/platform capital-intensity reference, not a global microbiological equipment ASP or sales share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximate hardware costs of GBP xx.xx for ELISA, GBP xx.xx for PCR and upwards of GBP xx.xx for mass spectrometry; these constrain relative equipment-value tiers.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The capital-intensive mass-spectrometry reference supports distinguishing high-value analytical portfolios from

3. Mettler-Toledo International Inc. - 2025 Form 10-K

- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 product sales of USD xx.xx and service revenue of USD xx.xx across all applications; supports separating equipment from service revenue.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 product sales of USD xx.xx service revenue of USD xx.xx and total sales of USD xx.xx.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Describes food-contaminant inspection alongside weighing, pharmaceutical and other applications, requiring food-safety and equipment-only adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 product sales of USD xx.xx separately from services, enabling an equipment-only supplier scale check with explicitly modeled food and safety adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes contaminant inspection from broader weighing and quality applications and reports stronger 2025 inspection growth than laboratory growth; this supports forecast direction, not the exact future share. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes camera-based package and label inspection from weighing and other applications, requiring safety-only optical attribution.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies contamination X-ray systems separately from quality-only uses and reports strong 2025 product-inspection growth; this supports scope and forecast direction, not technology share.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies metal-detection equipment as a distinct contaminant-inspection offering within a mixed-scope inspection business.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports USD xx.xx.805m of 2025 product sales and distinguishes services. The inspection portfolio includes contaminant detection and quality-only applications; food and safety eligibility remain modeled adjustments.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes inspection technologies integrated with material handling and use in packaging lines. Reports 2025 corporate sales of USD xx.xx; this is a broad scale-check input, not food-safety or deployment-specific revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates product and service revenue and describes capital-spending sensitivity, supporting equipment-only attribution and caution against treating a supported installation package as hardware value.

4. Mettler-Toledo International Inc. - January 2026 Healthcare Conference Presentation
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Historical company-wide sales of USD xx.xx provide an instrument-industry cycle reference, not an exact-market observation.
   - Evidence informing the 2018 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% constrains the pre-pandemic expansion assumption.
   - Evidence informing the 2019 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides a moderating cycle reference.
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% provides counterevidence to assuming that every food-related equipment function contracted during 2020.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: Historical company-wide reported USD sales growth of xx.xx% supports a strong reopening and delivery-recovery period, with a smaller increase assumed for the target market.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Historical local-currency growth of xx.xx% and reported USD growth of xx.xx% demonstrate the importance of currency translation when calibrating nominal historical growth.
   - Evidence informing the 2023 market-value input; displayed series and growth include calculations: Company-wide reported USD sales declined xx.xx%, supporting a capital-equipment normalization counterforce.
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Company-wide reported USD sales increased xx.xx%, providing a broad reference alongside weaker analytical-instrument purchasing.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Management's approximate 2025 sales mix assigns xx.xx% to product inspection and xx.xx% to food manufacturers. These are company mix estimates, not target-market shares.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates Product Inspection at approximately xx.xx% of 2025 company sales. This is a mixed-scope supplier business mix, not a target-market share. ([s202.q4cdn.com](https://s202.q4cdn.com/xx.xx/files/doc_presentations/2026/Jan/xx.xx/JPMorgan-2026-Healthcare-Conference-Presentation-FINAL.pdf))
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimated product inspection at approximately xx.xx% of 2025 company sales. This constrains supplier scale after explicit hardware, food and safety adjustments; it is not a global market share.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Management estimates product inspection at approximately xx.xx% of 2025 company sales. The model applies explicit equipment, food and safety adjustments for a bounded supplier scale check; this is not a global integrated-equipment share.
5. Agilent Technologies - 2017 Annual Report
   - Evidence informing the 2017 market-value input; displayed series and growth include calculations: Reports xx.xx% growth in the life sciences and applied markets business in 2017 and describes strong food-market growth; supports the direction of the early historical bridge without measuring equipment-only food-safety revenue.

6. Agilent Technologies - Fourth Quarter Fiscal 2021 Prepared Remarks
   - Evidence informing the 2020 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2020, challenging a blanket pandemic contraction assumption for laboratory equipment.
   - Evidence informing the 2021 market-value input; displayed series and growth include calculations: States that Agilent's food business grew xx.xx% in fiscal 2021; used to calibrate, rather than directly copy, the laboratory recovery assumption.
   - Evidence informing the 2022 market-value input; displayed series and growth include calculations: Describes strong entering backlog and logistics and inflation pressures, supporting a delivery-and-price bridge rather than assuming that all revenue growth represented new underlying testing demand.
7. Agilent Technologies - Fiscal 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Describes a significant 2024 decline in the Applied Markets food business, including weaker chromatography-mass-spectrometry and spectroscopy demand.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports fiscal 2025 revenue of USD xx.xx and describes renewed food-market growth.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The disclosed business includes services, consumables, software, quality applications and remarketed instruments; explicit exclusions are required before using it as a new-equipment sales proxy.
8. Agilent Technologies - Q1 2025 Results Presentation
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports food as xx.xx% of first-quarter fiscal 2025 revenue and instruments as xx.xx% of company revenue.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The model treats the food percentage as a full-year proxy and assumes a higher equipment mix within food; neither adjustment is presented as a disclosed annual food-equipment figure.
9. Waters Corporation - 2025 Annual Report
   - Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx down xx.xx%, providing a hardware-specific capital-cycle reference.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Waters instrument-system sales of USD xx.xx up xx.xx%, separately from chemistry consumables and services.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Food-safety attribution remains modeled because food is included within a broader industrial customer category.
   - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
   - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx sales offices and approximately xx.xx field representatives in 2025. These constrain the plausibility of direct analytical-equipment coverage but are not revenue-share weights. ([s205.q4cdn.com](https://s205.q4cdn.com/xx.xx/files/doc_financials/2025/ar/Waters-2025-Annual-Report.pdf))
10. Thermo Fisher Scientific Inc. - 2025 Form 10-K
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 chromatography and mass-spectrometry revenue of USD xx.xx.
   - Evidence informing the 2025 market-value input; displayed series and growth include calculations: This broader business includes non-food applications and supporting revenue; equipment, food and safety adjustments are explicit modeled inputs.

11. bioMérieux - 2025 Financial Results
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports 2025 Industrial Applications sales of EUR xx.xx.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports group equipment sales of EUR xx.xx, equipment rentals of EUR xx.xx, reagents and services. The model excludes rental and non-equipment revenue and estimates the industrial food-equipment split.
12. Neogen Corporation - Fiscal 2025 Annual Report
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports Food Safety segment revenue of USD xx.xx for the fiscal year ended May xx.xx 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: The segment includes kits, media, services and other activities; an equipment-only and human-food attribution is modeled rather than treating the segment total as equipment sales.

13. Testo - Annual Press Conference, January 23, 2025

- Evidence informing the 2023 market-value input; displayed series and growth include calculations: Reports 2023 group turnover growth of xx.xx%, providing a broad monitoring-supplier cycle reference.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports 2024 group revenue of EUR xx.xx, up xx.xx%; Instrumentation represented xx.xx% and Solutions represented xx.xx%.
- Evidence informing the 2024 market-value input; displayed series and growth include calculations: Reports EUR xx.xx of industrial-services revenue and a slight decline in Solutions, demonstrating why group growth and connected offerings cannot be equated with food-monitoring hardware growth.
- Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides the prior-year operating and revenue mix used for an explicitly assumed xx.xx% calendar-2025 bridge and food-hardware scope adjustment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx, with Instrumentation at xx.xx% and Solutions at xx.xx%; Solutions declined slightly. These mixed-scope observations constrain equipment attribution and challenge automatic connected-hardware growth. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-testo-verzeichnet-wachstum))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 group revenue of EUR xx.xx.5m, a xx.xx% Instrumentation mix, xx.xx% Instrumentation growth and an xx.xx% Solutions mix with slight decline. Separately reported services prevent treating broad group or connected-solutions revenue as food-monitoring hardware.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports a slight 2024 Solutions revenue decline alongside geographically uneven performance; qualifies assumptions of universal connected-equipment adoption.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports nearly EUR xx.xx of Spanish growth associated with McDonald's in 2024, but not a global foodservice hardware growth rate.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2024 business mix of xx.xx% Instrumentation and xx.xx% Solutions, used only after explicit food, hardware and within-business deployment assumptions to calibrate light-commercial monitoring.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Solutions declined slightly in 2024, providing counterevidence to an aggressive connected-hardware adoption assumption. The business categories do not themselves measure fixed deployment.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2024 Instrumentation at xx.xx% and Solutions at xx.xx% of group revenue, with a slight Solutions decline. These are product-business observations used to challenge an automatic enterprise/direct-channel uplift, not channel weights. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2025-

14. Anritsu Integrated Report 2025
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports PQA revenue of JPY xx.xx for the fiscal year ended March 2025, with xx.xx% growth.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: PQA includes food and pharmaceutical inspection, weighing and maintenance; it provides a mixed-scope scale and growth check, not calendar-2025 food-contaminant equipment sales.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: PQA revenue increased xx.xx% to JPY xx.xx, with reported overseas X-ray demand. Mixed food/pharmaceutical and equipment/service scope prevents treating this as target-category revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reported metal-detector demand in selected markets provides counterevidence to assuming complete displacement by X-ray inspection.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports engagement with Asian PQA distributors during the fiscal year ended March 2025. This is a commercial counterforce to automatic disintermediation, not a calendar-2025 distribution percentage. ([dl.cdn-anritsu.com](https://dl.cdn-anritsu.com/en-en/about-anritsu/ir/annual-report/2025/ar2025e.pdf))

15. Eurofins Scientific - FY 2025 Results Presentation
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Reports leasehold improvements, machinery, laboratory equipment and other capital expenditure declining from EUR xx.xx in 2024 to EUR xx.xx in 2025.
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Separately reports IT and real-estate expenditure. The broader capital-expenditure total is not treated as food-safety equipment purchases.
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: Provides an observed capital-intensity counterforce to the forecast: testing-network expansion and growth need not produce proportionate new-equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Declining mixed laboratory-related capital expenditure provides a purchasing-restraint counterforce for the common laboratory forecast, not a sampling-specific growth observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The broader buyer expenditure series constrains assumptions about laboratory expansion automatically requiring new supporting equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Continued network investment alongside lower mixed equipment-related expenditure supports retaining a capital-intensity restraint, without measuring incubation purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Leasehold improvements, machinery, laboratory equipment and other capex declined from EUR xx.xx in 2024 to EUR xx.xx in 2025; food-only instrument spending is not separately identified. ([cdnmedia.eurofins.com](https://cdnmedia.eurofins.com/corporate-eurofins/media/x0jkreyr/eurofins-scientific-2025-full-year-results-presentation.pdf))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Mixed leasehold, machinery, laboratory-equipment and other capex fell from EUR xx.xx in 2024 to EUR xx.xx in 2025; constrains outsourcing-related hardware-growth assumptions.
16. Federal Reserve - Foreign Exchange Rates, G.5A Annual, January 5, 2026
    - Evidence informing the 2025 market-value input; displayed series and growth include calculations: Provides 2025 average exchange rates of USD xx.xx per EUR and JPY xx.xx per USD for converting financial cross-check inputs.
17. FDA - FSMA Final Rule on Pre-Harvest Agricultural Water
    - Evidence informing the 2026 market-value input; displayed series and growth include calculations: The risk-based agricultural-water framework does not provide equipment-purchase quantities. It constrains the model against converting a compliance milestone directly into equipment sales.
    - Evidence informing the 2027 market-value input; displayed series and growth include calculations: Supports retaining a conditional purchasing assumption rather than inserting a mandatory farm-equipment acquisition surge.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies staggered 2025-2027 compliance dates and an assessment-based framework; does not provide equipment acquisition quantities or justify a purchasing surge.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The agricultural-water framework establishes compliance context but does not disclose equipment orders; constrains the forecast against treating a regulatory milestone as a mandatory purchasing surge.

18. USDA Mexico - Food Processing Ingredients Annual, April 3, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports food processing as xx.xx% of Mexico's GDP in 2024. Applying that sector-specific composition to captured 2025 GDP and an explicit equipment-intensity adjustment creates the modeled activity score.
19. Professional Samplers for Food, Pharmaceutical, Chemical and Environmental Industries
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer distinguishes collection hardware for bulk goods, liquids and frozen-food applications. This establishes category mapping, not a numerical sales weight. ([buerkle.de](https://www.buerkle.de/en/samplers/products))
20. Products and Accessories - Microbiology | INTERSCIENCE
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately marketed preparation equipment supports its distinct functional budget; product listings do not determine the allocation weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Combined incubation/reading offerings establish commercial overlap, supporting one-time principal-function attribution rather than duplicated equipment revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Standalone readers are distinguished from preparation and integrated incubation products, supporting non-overlapping category accounting. ([interscience.com](https://www.interscience.com/en/products/))
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately lists sample-preparation hardware, supporting the mechanical/fluidic purchased-function boundary rather than a sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Colony-reading and associated bacterial-analysis equipment establish a commercial role distinct from separately allocated preparation and thermal equipment.
21. PR18666 - 39903-251283 Percival Incubators - Contract History
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: CFIA's incubator contract awarded October xx.xx 2025 totals CAD xx.xx. It establishes dated procurement activity, not global unit prices or realized annual producer sales. ([canadabuys.canada.ca](https://canadabuys.canada.ca/en/tender-opportunities/contract-history/cw2410409-xx.xx))

22. Testo - Annual Press Conference, February 19, 2026

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports 2025 group revenue of EUR xx.xx, Industrial Services revenue of EUR xx.xx and xx.xx% Saveris growth. The mixed hardware/software/services recovery qualifies extrapolation of 2024 weakness but does not measure food-only hardware sales. ([testo.com](https://www.testo.com/de-DE/unternehmen/press-releases/xx.xx-xx.xx-2026-jahrespressekonferenz))

23. Digital Food Safety Management with testo Saveris Food

- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports xx.xx active sensors across more than xx.xx environments and distinguishes monitoring hardware from software and services. These undated installed-stock indicators support commercial presence, not annual shipments or a replacement rate. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies distribution centers among application settings; current sensor stock supports commercial classification, not logistics hardware ownership or annual sales.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies retail applications within an offering reporting xx.xx sensors across over xx.xx environments; the footprint is not backdated to 2025.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies restaurant and catering applications; supports multisensor premises-monitoring relevance without converting software activity into hardware sales.

24. CSIR-CFTRI Procurement Plan for Financial Year 2025-26, Updated February 24, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed GC and HPLC procurement examples constrain chromatography hardware tiers, not worldwide sales mix.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Spectrophotometer budget examples illustrate equipment-price heterogeneity used in the cohort assumptions.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Costed PCR hardware supports equipment-only molecular valuation, not reagent or service revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Real-time PCR and thermal-cycler budgets constrain the range of molecular instrument values.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A separately budgeted flow cytometer provides a commercial hardware-cost reference, not safety-attributable purchasing volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Homogenizer and centrifuge budgets supply the mechanical side of the explicitly bounded xx.xx:xx.xx preparation-value proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Freezer and incubator budgets support separate thermal equipment attribution; planned values remain funding-dependent.
25. LOMA Systems - Understanding the FAQs
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer discussion establishes an X-ray price premium and differentiated purchasing role, but does not quantify a global ASP or substitution rate.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer identifies metal detection as generally less expensive for its distinct application set, supporting relative-price assumptions and continued participation.

26. Hanna Instruments - Foodcare Meters
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: US manufacturer asking-price examples include a USD xx.xx pH tester and higher-value portable meters; used only to constrain indicative hardware tiers.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A USD xx.xx thermometer example constrains the low-cost physical-monitoring tier. Current retail prices are not treated as observed 2025 producer realizations.
27. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The June xx.xx 2024 institutional purchasing announcement supports continued commercial participation of a distinct molecular platform, not its global equipment-sales weight.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports more than five years of prior agency use and a renewed purchasing relationship for the isothermal platform; instrument-only consideration is not disclosed.
28. CDC - PulseNet Timeline
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Documents an institutional sequencing role within the broader molecular category, qualifying a universal industrial-platform replacement assumption.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: All xx.xx state public-health laboratories transitioned to sequencing surveillance in 2019. This supports established deployment, not worldwide equipment revenue or forecast placement counts.
29. bioMérieux - GENE-UP
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A marketed foodborne-hazard detection instrument supports the molecular equipment category and continued commercial availability, not sales volume.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: GENE-UP establishes a distinct marketed PCR offering; associated assays and support are not included as separate equipment revenue.

30. Hygiena - EnSURE Touch ATP Hygiene Monitoring System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: EnSURE Touch establishes a marketed ATP hygiene-monitoring instrument within the broader luminescence category. Its listing does not measure placements or separately supplied software revenue.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes the cleaning-verification equipment category and multi-application platform boundary only; it supplies no 2025 sales weight or installed-base observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies EnSURE Touch as a handheld hygiene-monitoring instrument connected to SureTrend, supporting portable-reader classification without assuming independence from software or support relationships.
31. R-Biopharm Food & Feed Analysis - Testing Laboratories
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: RIDA CUBE SCAN establishes a marketed enzymatic/colorimetric reader, including a sulfite application, supporting the broader biochemical boundary beyond immunoassay readers without establishing revenue.
32. FOSS - BacSomatic
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: BacSomatic establishes a commercial flow-cytometry offering for raw-milk hygiene assessment; broader quality and somatic-cell activity is not automatically food-safety-attributable revenue.
33. Mirion - FoodScreen Radiological Food Screening System
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FoodScreen establishes an offered radiological food-screening system, supporting a commercial category distinct from physical-contaminant X-ray inspection. No sales or installed-base quantity is disclosed.
34. Agilent Technologies, Inc. - Fiscal 2025 Form 10-K
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FY2025 food revenue was USD 637m versus USD 592m; company-wide instrumentation revenue was USD 2427m versus USD 2354m. These broader-scope inputs constrain analytical hardware scale and relative growth, not objective shares.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Food and instrumentation disclosures constrain a shared analytical-platform proxy but do not identify allergen-specific sales.

35. bioMérieux - 2025 Financial Results
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports EUR xx.xx.3m group equipment sales, EUR xx.xx.8m total sales and EUR xx.xx.9m Industrial Applications sales in 2025. Separate equipment, reagent, service and rental categories constrain hardware eligibility; equipment growth is a forecast calibration input, not a future share observation.
36. Switch to EnSURE Touch - Hygiena
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A conditional hardware trade-in offer shows that placements and standalone equipment realization can diverge. Used to temper the forecast price/mix assumption, not backdated to 2025 or treated as observed uptake.
37. Sum Up of Radionuclide Test Results Reported in FY2024 - Report as of March 31, 2025
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Japan reported xx.xx food radionuclide samples in FY2024, ended March xx.xx 2025. This is an activity comparator supporting continuing surveillance, not equipment purchases or calendar-2025 equipment revenue.
38. FSMA Final Rule for Preventive Controls for Human Food - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes monitoring and verification responsibilities. Supports the commercial objective boundary and the assumption that required records do not automatically create new-equipment purchases; supplies no purchasing quantity.
39. Environmental Sampling - FDA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Environmental sampling can concern named microbial hazards. Supports attributing relevant equipment to microbiological objectives rather than automatically classifying environmental activity as nonspecific hygiene.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes food-production environmental contamination from product sampling and covers contact and non-contact surfaces; supports the environmental application boundary, not market size.

40. Metastudy on Food Testing Laboratories in India
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Historical NABL data identify captive food-business laboratories while warning that many captive facilities fall outside accreditation coverage.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Private laboratories account for xx.xx% of the historical accredited population; this is an ownership proxy, not equipment spending.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Central and state government categories total xx.xx% of the historical accredited population, supporting a distinct public institutional cohort.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Institutional laboratories represent xx.xx% of the historical accredited population; global academic equipment attribution remains modeled.
41. Ishida X-ray Technology Delivers Enhanced Quality Control for Poultry Line - Nikas Case Study
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports an installed inspection system at Nikas's food-manufacturing factory; planned additional systems are not treated as realized sales or a global allocation weight.
42. Laboratory Accreditation for Analyses of Foods (LAAF) Program & Final Rule
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Specified owners and consignees must use accredited laboratories in covered circumstances; this establishes external fulfillment, not universal instrument ownership or a purchase quantity.
43. Accreditation of Laboratories to Conduct Food Testing - Preliminary Regulatory Impact Analysis
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: A historical survey of xx.xx multi-farm egg owners reported xx.xx% using state/public-university laboratories and xx.xx% private laboratories; a narrow check against assuming farm ownership.

44. Legislation - Food Contact Materials
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer compliance documentation establishes a commercial responsibility but does not distinguish internal equipment ownership from accepted external evidence.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Establishes material-safety compliance documentation and traceability obligations distinct from surface contamination; supports the allocation boundary, not an observed equipment-purchase ratio.
45. Retail Food Protection
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: FDA identifies more than one million US retail/foodservice establishments in aggregate; supports a large premises-monitoring universe, not the modeled global retail count.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Includes restaurants, cafeterias and institutional outlets in the regulated universe; supports foodservice monitoring relevance without measuring annual purchases.
46. FSMA Final Rule on Sanitary Transportation of Human and Animal Food
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates shippers, loaders, carriers and receivers and their responsibilities; supports acquisition-authority attribution rather than allocating hardware to every shipment participant.
47. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Competition covers one instrument and additional support; the workspace records a February xx.xx 2026 award-notice publication, not hardware-only realized value or 2025 sales.
48. Equipment Grants Program
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The 2026 program lists USD xx.xx estimated funding and USD xx.xx-xx.xx awards for shared food/agricultural science equipment; neither amount measures global food-safety sales.

49. Thermo Fisher Scientific - Quality control, beyond the standard: Innovative products for quality control in food and beverage production
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The food-and-beverage portfolio distinguishes portable meters and reusable handheld equipment from laboratory installations. This supports configuration mapping only, not numerical sales weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists benchtop preparation equipment, laboratory refrigerators, clean benches and microbiological incubators, supporting the standalone classification of the relevant inherited laboratory budgets.
50. MAS-100 Eco Airsampler for food industry - Merck
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies MAS-xx.xx Eco as portable sampling equipment for the food-and-beverage industry. Establishes a commercial sampling-category mapping, not a sales fraction or equipment-use instruction.
51. Sampling System - Dinnissen
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes a dedicated automated sampling offering for food producers and production installations. Supports the production-connected sampling category; neither broader processing equipment nor full-system project value is included in the modeled sampling numerator.
52. ID 6121155 - AFBI - Supply, Delivery and Support of a Liquid-Chromatographic Mass-Spectrometer - UK7 Contract Details Notice, March 13, 2026
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The official contract notice reports GBP xx.xx excluding VAT, signed February xx.xx 2026, for an LC-MS package including support obligations. It tests the handover and package-comparability finding but does not establish 2025 equipment revenue, completed delivery or a hardware-only price.
53. testo 104-IR - Dual purpose IR and penetration thermometer
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The manufacturer markets a pocket-sized food thermometer for receiving and inspection roles, supporting portable preventive-monitoring attribution without establishing its market weight.

54. Testo - Automated monitoring and documentation of temperatures at all refrigerated sites with testo Saveris 2

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: The dated supermarket offering describes a three-logger connected monitoring package. It supports classifying fixed facility monitoring separately from production-line integration; the package count is not used as a sales-share weight.

55. Frequently Asked Questions - Wholesale - U.S. Census Bureau

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Manufacturer-controlled sales offices support direct attribution; affiliation, not a local office label, determines classification. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Own-account buying and resale supports the distributor numerator boundary. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Commission-based intermediation is distinguished from own-account dealing; the classification does not measure its market prevalence. ([census.gov](https://www.census.gov/programs-surveys/economic-census/year/2022/about/faq/faq-wholesale.html))

56. Agilent Technologies, Inc. - Fiscal 2025 Annual Report

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Describes predominantly direct applied-market selling; this supports the larger-system cohort premise, not the assumed xx.xx% probability.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies an active reseller program alongside direct selling, supporting a nonzero resale route within the analytical-equipment model.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies sales agents supplementing geographic and smaller-account coverage. This supports the agency model's commercial premise, not its numerical share or a future observed allocation.
([s24.q4cdn.com](https://s24.q4cdn.com/xx.xx/files/doc_financials/2025/ar/A-ARS-xx.xx-K-BMK-2025.pdf))

57. METTLER TOLEDO - General Distribution Terms

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Requires distributors to transact on their own account and provide corresponding customer warranty support, supporting role attribution and continuing commercial relevance without providing sales weights.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Expressly distinguishes the distributor relationship from agency, supporting separation of own-account resale from commission-mediated manufacturer sales.
([mt.com](https://www.mt.com/ca/fr/home/site_content/legal/distribution-terms/Mettler-Toledo-GDT.html))

58. Mettler-Toledo Standard Terms and Conditions for Sales and Service

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies the contracting manufacturer entity through order documents and makes additional costs and services order-specific. Supports direct attribution and the hardware-only valuation bridge, not a numerical channel share. ([mt.com](https://www.mt.com/gb/en/home/site_content/legal/commercial_terms/sales_service_terms_glo.html))

59. Food and Beverage Resource Guide for Commercial Food Testing Laboratories

- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Supplier portfolio spans multiple food-safety application categories, supporting fractional attribution of shared analytical equipment rather than one instrument per commodity.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies fats and edible oils within the supplier analytical portfolio; establishes application mapping, not category revenue.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists supplement-related analytical applications; supports commercial-category relevance without quantifying the modeled purchasing exposure.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Lists food-additive and processing-aid analytical applications, supporting a distinct ingredient-safety allocation premise.
- Evidence informing base-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.
- Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Identifies food-contact-material safety applications; supports the material-safety boundary rather than surface-hygiene substitution.

60. Food Categories - Codex GSFA
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Hierarchical food descriptors constrain the product crosswalk; they are not equipment-spending weights.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separates dairy products and analogues from fat-product categories.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes edible ices separately from dairy products; supports the non-dairy frozen-dessert boundary, not a sales observation.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Separately recognizes confectionery and sweeteners, combined within the retained node.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes cereals from bakery wares; the retained node combines both.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes eggs and egg products as a distinct commodity group.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Category xx.xx supports the combined seasoning, soup, sauce and protein-product crosswalk.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes special dietary foods and supplements separately.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes beverages separately from dairy-based products.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes ready-to-eat savory snacks as a product category.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Recognizes prepared foods, supporting supplied-product attribution rather than ingredient double counting.
61. FAO Food Outlook: Global Output of Key Food Commodity Crops on Course for New Records
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports xx.xx tonnes of global hen-egg production in 2023, with China contributing xx.xx%; constrains global commercial footprint, not equipment revenue.

62. Dairy and Dairy Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Official world-milk production projection of xx.xx% annually implies approximately xx.xx% over seven years; independently constrains, but does not verify, the modeled xx.xx% dairy exposure increase.
63. Fish and Other Aquatic Products - OECD-FAO Agricultural Outlook 2025-2034
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Reports approximately xx.xx Mt of aquatic production in 2024 and xx.xx% food-use allocation in the projection base period; qualifies a US-only processing proxy.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Projects aquatic food demand increasing xx.xx% over ten years, constraining the modeled seven-year seafood exposure multiplier to xx.xx; equipment conversion remains assumed.
64. Safe Water Saves Water
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Distinguishes intended food-chain water uses and describes voluntary fit-for-purpose guidance; supports a separate input-water matrix without implying mandatory equipment ownership or purchase quantities.
65. Safety That Suits You - Testo
    - Evidence informing base-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.
    - Evidence informing forecast-year allocation inputs; displayed values and growth are calculated: Markets standalone transport/storage loggers and connected monitoring offerings. Establishes commercial role and alternative configurations, not historical shipments or a market-share percentage.

17. Competitive Landscape

17.1. Market Share Analysis, 2025

Supported positioning in Food Safety Testing Equipment follows application coverage and account access rather than a supplier's overall laboratory breadth. bioMérieux's GENE-UP offer combines a platform with associated applications and instrument support. ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪ ▪▪ ▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪

OEM and represented-platform routes can provide alternatives to developing every branded equipment relationship independently. IUL, SA explicitly supplies OEM products, and ProGnosis Biotech markets equipment through both its own related business and a Byonoy partnership. ▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪ ▪▪▪▪▪ ▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪

Latin American channel suppliers often provide access to an existing manufacturer's equipment rather than another independent platform. ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ These routes can support a local quotation and handover relationship, but each still requires confirmation of present appointment, model availability, warranty authority, and support responsibility.

▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪ Buyers can investigate local supply for a specific preparation requirement without assuming that each seller manufactures a separate competing platform. The comparison should establish the actual equipment maker and the party responsible for delivery, installation, and support.

Manufacturer-documented channels provide stronger appointment evidence than an uncorroborated regional-presence claim. Bentley Instruments identifies HTS Centroamérica in its distributor information. ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪

[illegible] These propositions differ from a direct manufacturer contract because the local seller and manufacturer may retain separate obligations. Equipment buyers should obtain a model-and-destination undertaking and a clear escalation route before treating an advertised local portfolio as a complete service commitment.

Hospitality and site-measurement channels serve a different acquisition from specialist laboratory platforms. [illegible] For restaurants and catering businesses, the procurement question is whether the offered instrument, records arrangement, and support fit the required site control; a general compliance-oriented description does not confer customer or regulatory approval.

[illegible] ECC Algérie's EnSURE listing is an advertised equipment route, while LabMart Limited lists Romer Labs' AgraVision Pro in a Ghana-facing storefront. These are relevant alternatives for local contracting and support qualification, not evidence of independent manufacture, completed delivery, or identical support across countries.

Water-related local suppliers should be assessed against the accepted food-chain water requirement. Labearer Court Limited markets Lovibond instruments to food-and-beverage users in Kenya. [illegible]

Southeast Asian access is particularly territory-sensitive. [illegible]

[illegible] These routes should be compared as different local commercial relationships, not automatically as equivalent independent equipment platforms or evidence of nationwide rights.

North American and Australasian channel relationships create another distinction between the equipment maker and the local supplier. [illegible] A channel can contribute commercial access and support while leaving application acceptance and manufacturer responsibility separate.

Figure 28. Global Food Safety Testing Equipment Market Share, by Key Player, 2025

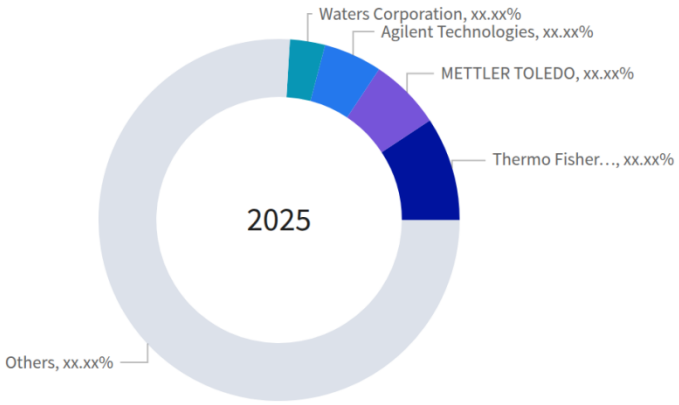

Table 505. Global Food Safety Testing Equipment Market Share, by Key Player, 2025

Key Player	Share (%)
Agilent Technologies, Inc.	xx.xx
Anritsu	xx.xx
bioMérieux	xx.xx
Bruker Corporation	xx.xx
FOSS	xx.xx
Hygiena	xx.xx
Loma Systems	xx.xx
METTLER TOLEDO	xx.xx
Minebea Intec	xx.xx
Neogen Corporation	xx.xx
PerkinElmer	xx.xx
Sartorius	xx.xx
Shimadzu Corporation	xx.xx
Testo	xx.xx
Thermo Fisher Scientific Inc.	xx.xx
Waters Corporation	xx.xx
Others	xx.xx

Sources & Evidence

1. GENE-UP - bioMérieux
   - bioMérieux associates GENE-UP with application offerings and instrument support, supporting package-specific account-access analysis. ([biomerieux.com](https://www.biomerieux.com/corp/en/our-offer/industry-products/gene-up-automated-pathogen-detection.html))
   - Evidence informing base-year company-share estimates: Establishes the GENE-UP food-related instrument and associated support offering; supports separating equipment from separately supplied application and service revenue.
2. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
   - Neogen's June xx.xx 2024 announcement reports USDA FSIS selection of its isothermal MDS for specified applications; continuing purchases are not established. ([investors.neogen.com](https://investors.neogen.com/news/news-details/2024/Neogen-MDS-Awarded-Contract-from-USDA-Food-Safety-and-Inspection-Service-xx.xx-xx.xx-2024/default.aspx))
   - Evidence informing base-year company-share estimates: Confirms the June xx.xx 2024 company-reported FSIS selection; establishes a dated customer reference rather than a measured 2025 hardware numerator.
3. DKSH and Hygiena® Expand Partnership to Deliver Food Safety and Health Diagnostics Solutions in Malaysia
   - The January xx.xx 2025 Malaysian announcement assigns DKSH commercialization and after-sales roles for Hygiena products. ([dksh.com](https://www.dksh.com/my-en/home/media/news/dksh-and-hygiena-expand-partnership-to-deliver-food-safety-and-health-diagnostics-solutions-in-malaysia))

4. Driving Market Expansion for Hygiena's Diagnostic Solutions in Southeast Asia
   - DKSH's August xx.xx 2025 account limits Indonesian food-and-beverage coverage to Sumatra. ([lab-solutions.dksh.com](https://lab-solutions.dksh.com/insights/driving-market-expansion-for-hygienas-diagnostic-solutions-in-southeast-asia/))
5. XDive Instrument - Star Array Pte. Ltd.
   - The OEM proposition supports an alternative commercial sourcing route, conditional on actual rights and obligations. ([star-array.com](https://www.star-array.com/xdive))
6. Equipment - ProGnosis Biotech
   - The documented represented-platform route supports a conditional OEM and channel sourcing comparison. ([prognosis-biotech.com](https://www.prognosis-biotech.com/equipment/))
7. Company - IUL
   - IUL's OEM offering establishes a commercial sourcing route, not automatic customer acceptance or territorial rights. ([iul-instruments.com](https://iul-instruments.com/company/))
8. Luminultra and Kikkoman Partnership: Food Safety Testing
   - The relationship establishes a distribution route rather than separate ownership of Kikkoman equipment design. ([luminultra.com](https://www.luminultra.com/resource/luminultra-kikkoman-partnership/))
9. Hygiene ATP Testing Meter - Bioeasy International
   - Bioeasy International advertises hygiene-monitoring meters in Malaysia; the offering does not establish ownership linkage to Shenzhen Bioeasy. ([bioeasy.my](https://www.bioeasy.my/hygiene-atp-testing-meter/))
10. NEOGEN - Biodinamix
    - Biodinamix advertises Neogen plate-reading and LM1 hygiene equipment through its Mexican commercial offering. ([biodinamix.com.mx](https://biodinamix.com.mx/wp/neogen/))
11. Luminómetro ATP Clean-Trace - Rodin SRL
    - Rodin commercially presents Neogen Clean-Trace hygiene equipment and purchase-related support in Argentina. ([rodinsrl.com.ar](https://rodinsrl.com.ar/luminometro-atp-xx.xx-beneficios-del-clean-trace-para-verificar-la-higiene/))
12. Environmental Monitoring Catalog - Redilab
    - Redilab's Argentine environmental-monitoring catalog lists Neogen Clean Trace LM1. ([redilab.com.ar](https://redilab.com.ar/shop?id=xx.xx))
13. SystemSURE Plus - BioCheck
    - BioCheck SPA offers Hygiena SystemSURE Plus through its Chilean commercial catalog. ([biocheck.cl](https://biocheck.cl/catalogo/equipos-instrumentacion/systemsure-plus-luminometer/))
14. Nosotros - Miuras
    - Miuras describes representation of Hygiena Qualicon and BAX in Colombia; continuing appointment terms are not established. ([miuras.com.co](https://www.miuras.com.co/nosotros/))
15. Luminómetro MVP ICON - Quimiem
    - Quimiem identifies an Ecuadorian distribution role for MVP ICON hygiene-monitoring equipment. ([quimiem.com](https://www.quimiem.com/producto/luminometro-mvp-icon/))
16. Charm EZ Protect+ - PEF Analysis
    - PEF Analysis offers Charm EZ Protect+ through a Uruguay-facing quotation route. ([pefanalysis.com.uy](https://pefanalysis.com.uy/productos/charm-ez-protect-))
17. Homogeneizador AGI.130 - Ethik
    - Ethik markets AGI.xx.xx microbiological preparation equipment, establishing a local offering rather than a complete laboratory replacement package. ([ethik.com.br](https://www.ethik.com.br/produto/homogeneizador-stomacher-agi-xx.xx/))
18. Homogeneizador - Marconi
    - Marconi's catalog lists microbiological homogenizer equipment, supporting a preparation-specific local supply comparison. ([marconi.com.br](https://marconi.com.br/categoria/xx.xx/xx.xx/homogeneizador))

19. Homogeneizador de Amostras INT-BAGMIXER-400-S - Tecnal
    - Tecnal lists INT-BAGMIXER equipment and identifies a French manufacturer, distinguishing local commercialization from assumed Tecnal manufacture. ([web2021aws.tecnal.com.br](https://web2021aws.tecnal.com.br/pt-BR/produtos/detalhes/8965_homogeneizador_de_amostras))
20. Distributor Information - Mexico - Bentley Instruments
    - Bentley's manufacturer distributor information identifies HTS de Centroamerica, supporting a manufacturer-documented channel inquiry. ([bentleyinstruments.com](https://bentleyinstruments.com/distributor-countries/mexico))
21. About Advanced Scales & Equipment Ltd.
    - Advanced Scales describes Jamaican sales and service for metal-detection and X-ray equipment and claims a SAFELINE distribution role. ([advancedscales.com](https://advancedscales.com/about/))
22. Hygiena - RESTECH-AL BAHATHA
    - RESTECH-AL BAHATHA lists named Hygiena equipment including BAX and EnSURE Touch through its Saudi commercial offering. ([albahatha.com](https://albahatha.com/hygiena))
23. Food Processing - Perfect Vision Trading & Services LLC
    - Perfect Vision lists EnSURE Touch within its Oman-facing food-processing offering. ([perfectvisionllc.com](https://perfectvisionllc.com/product/food-processing/))
24. Food Safety and Microbiology Testing Solutions - REDA Lab
    - REDA Lab markets food-related microbiology, preparation, and hygiene-equipment categories across addressed GCC locations; named configurations remain necessary. ([redalab.com](https://redalab.com/products/food-safety-microbiology-testing/))
25. About Us - ThermoPro UAE
    - ThermoPro UAE identifies its operating measuring-instrument business and hospitality offering; the page does not establish blanket food-safety approval. ([thermopro.ae](https://thermopro.ae/aboutus/))
26. Food Management - Specifico & Co.
    - Specifico presents food-safety tools and temperature/time-control catalog categories, supporting a hospitality-tool purchasing context. ([specificoco.com](https://specificoco.com/product-section/food-management/))
27. BAX System Q7 - National Separations
    - National Separations advertises Hygiena BAX Q7 through a quotation route, establishing a local equipment-channel offering. ([natsep.co.za](https://natsep.co.za/product/one-bax-system-q7-cycler-detector/))
28. Brands We Represent - Beckman Egypt
    - Beckman Egypt states that it supplies, installs, and supports represented equipment and includes Hygiena among its brands. ([beckman-egypt.com](https://www.beckman-egypt.com/brands))
29. AgraVision Pro Reader - LabMart Limited
    - LabMart lists AgraVision Pro in its Ghana-facing commercial storefront; the listing does not establish completed delivery or appointment terms. ([labmartgh.com](https://www.labmartgh.com/shop/xx.xx-agravisiontm-pro-reader-xx.xx))
30. Food & Beverage Water Testing Equipment - Labearer Court Limited
    - Labearer Court markets Lovibond instruments to Kenyan food-and-beverage operations for water-related measurement. ([labearercourt.com](https://labearercourt.com/industries/food-beverage))
31. Hach Technologies Products - Nesvax Innovations
    - Nesvax describes a Kenyan Hach appointment covering laboratory and online instrumentation and identifies food-and-beverage applications. ([nesvax.co.ke](https://nesvax.co.ke/our-products/hach-technologies-products/))
32. About Aqualytic
    - Aqualytic describes a geographically bounded South African HACH distribution role and local instrumentation support. ([aqualytic.co.za](https://www.aqualytic.co.za/about/))

33. Food Safety Division - Premier Diagnostics
    - Premier Diagnostics' Malaysian food-safety catalog lists Lumitester Smart equipment. ([premierdiagnostics.com.my](https://www.premierdiagnostics.com.my/eco6.html))
34. Food Safety - Camtech Diagnostics
    - Camtech's food-safety portfolio identifies Veritide-produced portable contamination-screening equipment, separating manufacturer and channel roles. ([camtechdiagnostics.com](https://www.camtechdiagnostics.com/food-safety.html))
35. MinebeaMitsumi Inc. - Products, Locations and Technologies in Europe
    - Evidence informing base-year company-share estimates: Reports more than xx.xx inspection systems sold across industries, providing a historical cumulative commercial anchor rather than annual shipments or active calendar-2025 equipment.
    - Evidence informing base-year company-share estimates: Identifies checkweighers, metal detectors and X-ray inspection systems within a broader industrial portfolio, requiring product and application exclusions.
36. Minebea Intec Strengthens Global Growth Strategy
    - Evidence informing base-year company-share estimates: The September xx.xx 2025 company announcement confirms continuing inspection operations, MinebeaMitsumi ownership and a local commercial partnership.
    - Evidence informing base-year company-share estimates: Supports producer-versus-channel attribution; the announcement, employee counts and partner network do not disclose attributable annual equipment sales.
37. X-Ray Inspection Systems for the Food Industry - Minebea Intec
    - Evidence informing base-year company-share estimates: Markets food-contaminant inspection equipment while distinguishing additional quality-checking applications.
    - Evidence informing base-year company-share estimates: Supports eligible equipment classification and exclusion of quality-only activity, but does not establish the assumed product mix, prices or annual purchase conversion.
38. Thermo Fisher Scientific Inc. - 2025 Form 10-K
    - Evidence informing base-year company-share estimates: Provides 2025 revenue anchors for chromatography/mass spectrometry, chemical analysis, microbiology, genetic sciences and laboratory products; food-equipment attribution remains modeled.
39. Food and Beverage - Thermo Fisher Scientific
    - Evidence informing base-year company-share estimates: Maps food analytical, molecular, supporting laboratory and inspection offerings while also identifying quality and authenticity applications that require exclusion.
40. bioMérieux - 2025 Financial Results
    - Evidence informing base-year company-share estimates: Reports Industrial Applications revenue of EUR xx.xx and separates group equipment sales from reagents, services and rentals; supplies the equipment-mix proxy.
    - Evidence informing base-year company-share estimates: The disclosed equipment-to-total-sales ratio calibrates the assumed microbiology hardware fraction; it is not an observed Thermo Fisher ratio.
41. VIDAS KUBE - bioMérieux
    - Evidence informing base-year company-share estimates: Provides a separate marketed food-pathogen instrument proposition; does not establish platform-level sales or identical application coverage.
42. Neogen Corporation - 2025 Form 10-K
    - Evidence informing base-year company-share estimates: Reports fiscal-2025 Food Safety product-category revenue used as the hardware-attribution base and identifies substantial consumable and service activity requiring removal.
43. SureTrend Food Safety Management Software - Hygiena
    - Evidence informing base-year company-share estimates: Reports a current footprint exceeding xx.xx facilities and xx.xx users; supplies the facility-model anchor, not observed 2025 equipment sales.
    - Evidence informing base-year company-share estimates: Shows support for external and third-party results, requiring an assumed hardware-participation adjustment.

44. EnSURE Touch ATP Luminometer for Hygiene Monitoring - Hygiena
    - Evidence informing base-year company-share estimates: Establishes the handheld hygiene-instrument category and connected-records relationship; supports the hardware classification, not assumed ownership or annual replacement quantities.
45. Real-Time PCR Pathogen Detection for Food Safety Testing - Hygiena
    - Evidence informing base-year company-share estimates: Establishes marketed BAX/PCR and associated preparation-equipment roles included in the modeled facility basket; supplies no shipment counts or equipment revenue.
46. Agilent Technologies, Inc. - Fiscal 2025 Annual Report
    - Evidence informing base-year company-share estimates: Reports annual food revenue of USD xx.xx and instrumentation revenue of USD xx.xx; defines remarketed and third-party equipment inclusions requiring adjustment.
    - Evidence informing base-year company-share estimates: Food revenue divided by revenue excluding Diagnostics and Clinical supplies the explicitly bridged comparable-supplier food-mix proxy.
47. 6546 LC/Q-TOF - Agilent
    - Evidence informing base-year company-share estimates: Markets the xx.xx LC/Q-TOF for food safety alongside authenticity and other uses, supporting application-specific safety attribution rather than counting the complete portfolio.
48. Multi-Vendor Services - Agilent
    - Evidence informing base-year company-share estimates: Establishes a separately marketed multi-vendor service offering; supports excluding service coverage and service revenue from the new-equipment numerator.
49. Waters Corporation - 2025 Annual Report
    - Evidence informing base-year company-share estimates: Reports USD xx.xx of 2025 Waters instrument-system sales separately from chemistry, service and TA sales; provides the hardware-specific numerator anchor.
    - Evidence informing base-year company-share estimates: Reports a broader industrial customer category that cannot be equated with food-safety revenue.
50. Food Contaminant Testing - Waters
    - Evidence informing base-year company-share estimates: Establishes LC/MS and GC/MS food-contaminant equipment participation; does not disclose the assumed food or safety revenue fractions.
51. Analytical Standards & Reagents - Waters
    - Evidence informing base-year company-share estimates: Lists VICAM among Waters brands, supporting the explicit cross-brand nonduplication condition.
52. Shimadzu - Presentation Slides for the Fiscal Year Ended March 31, 2025
    - Evidence informing base-year company-share estimates: Provides the rounded January-March 2025 analytical-segment revenue contribution and recurring-sales context used for calendar conversion.
53. Shimadzu - Third-Quarter Presentation Slides for the Fiscal Year Ending March 2026
    - Evidence informing base-year company-share estimates: Reports April-December 2025 Analytical & Measuring Instruments revenue of JPY xx.xx and recurring-sales ratios; supports the calendar and equipment-oriented revenue bridges.
54. Solutions for Food Safety - Shimadzu Corporation
    - Evidence informing base-year company-share estimates: Maps named LC/MS equipment to food-contaminant applications while warning that local product availability varies; supports bounded application attribution.

55. Federal Reserve - Foreign Exchange Rates, G.5A, January 5, 2026
    - Evidence informing base-year company-share estimates: Provides the 2025 annual average of USD xx.xx per EUR used to translate the modeled equipment numerator.
    - Evidence informing base-year company-share estimates: Provides the 2025 annual average of JPY xx.xx per USD used for the calendar equipment-revenue bridge.
    - Evidence informing base-year company-share estimates: Reports the 2025 annual average of DKK xx.xx per USD, used to convert the modeled DKK xx.xx numerator.
    - Evidence informing base-year company-share estimates: Reports the 2025 annual average of USD xx.xx per EUR, used to convert the modeled EUR xx.xx numerator.
    - Evidence informing base-year company-share estimates: Provides the 2025 annual exchange rate of JPY xx.xx per USD used to translate the modeled Anritsu numerator.
    - Evidence informing base-year company-share estimates: Provides the 2025 annual exchange rate of USD xx.xx per EUR used to translate the modeled Testo numerator.
56. Bruker Corporation - 2025 Annual Report
    - Evidence informing base-year company-share estimates: Reports 2025 BSI CALID revenue of USD xx.xx and BioSpin revenue of USD xx.xx, providing the two reporting envelopes used in the model.
    - Evidence informing base-year company-share estimates: Describes food-microbiology and analytical applications alongside substantial clinical, research and quality-control activity; equipment, food and safety fractions remain modeled.
57. PerkinElmer Announces Financial Results for the Fourth Quarter and Full Year of 2022
    - Evidence informing base-year company-share estimates: Reports USD xx.xx combined Discovery & Analytical Solutions revenue and USD xx.xx continuing revenue for 2022.
    - Evidence informing base-year company-share estimates: Their USD xx.xx rounded difference supplies the historical disposed-business envelope, not a directly observed 2025 food-equipment numerator.
58. Revvity, Inc. - Quarterly Report for the Period Ended July 2, 2023
    - Evidence informing base-year company-share estimates: Records the March xx.xx 2023 sale of Applied, Food and Enterprise Services to the New Mountain-controlled purchaser, including PerkinElmer branding.
    - Evidence informing base-year company-share estimates: Supports separation of the modeled operating business from the former public company's continuing Revvity activities.
59. PerkinElmer - New Mountain Capital
    - Evidence informing base-year company-share estimates: Identifies PerkinElmer as a controlled New Mountain investment dated March 2023.
    - Evidence informing base-year company-share estimates: Describes analytical instruments, consumables and OneSource services, supporting the need for an equipment-only scope adjustment rather than using all operating-business revenue.
60. Food Testing Solutions - PerkinElmer
    - Evidence informing base-year company-share estimates: Markets food-testing instruments for contaminant analysis, establishing the commercial product connection used to scope the historical business envelope.
    - Evidence informing base-year company-share estimates: The portfolio does not disclose the model's equipment, food or safety revenue fractions.
61. A record year for FOSS - FOSS company announcement
    - Evidence informing base-year company-share estimates: FOSS's official company announcement reports DKK xx.xx of 2025 revenue and xx.xx% organic growth.
    - Evidence informing base-year company-share estimates: Provides the broad commercial revenue envelope; the new-equipment, dairy, microbiology and safety fractions are explicitly modeled.
62. Fast and simple bacteria and somatic cell count in one handy instrument - FOSS
    - Evidence informing base-year company-share estimates: Markets BacSomatic for raw-milk bacterial and somatic-cell counting.
    - Evidence informing base-year company-share estimates: Supports separating a bacterial/hygienic equipment role from composition and payment-only applications; does not establish product sales or the modeled family weights.

63. Sartorius achieves considerable profitable growth in 2025 and maintains positive outlook
    - Evidence informing base-year company-share estimates: Reports preliminary 2025 Lab Products & Services sales of EUR xx.xx, down xx.xx% reported and up xx.xx% in constant currencies.
    - Evidence informing base-year company-share estimates: Distinguishes strong consumables/services from subdued instruments, supporting hardware-specific rather than divisional-growth attribution.
64. Instruments - Microbiological Testing - Sartorius
    - Evidence informing base-year company-share estimates: Identifies microbiological sampling and filtration instruments for food, beverage and water laboratories.
    - Evidence informing base-year company-share estimates: Supplies the commercial connection for supporting-hardware attribution, not the assumed customer or product-family revenue shares.
65. Mettler-Toledo International Inc. - 2025 Form 10-K
    - Evidence informing base-year company-share estimates: Reports 2025 product sales of USD xx.xx separately from USD xx.xx of service revenue.
    - Evidence informing base-year company-share estimates: Reports laboratory instruments and related services at approximately xx.xx% of sales and describes inspection and laboratory-measurement offerings used to construct separate non-overlapping modeled components.
66. Mettler-Toledo International Inc. - January 12, 2026 Healthcare Conference Presentation
    - Evidence informing base-year company-share estimates: Provides management's approximate xx.xx% product-inspection and xx.xx% food-manufacturer sales mixes.
    - Evidence informing base-year company-share estimates: These broad mix anchors require modeled hardware, application and safety adjustments and are not final market-share observations.
67. LOMA SYSTEMS - Inspection Technologies Overview
    - Evidence informing base-year company-share estimates: Reports more than xx.xx installed machines across more than xx.xx countries and a business established in the 1960s.
    - Evidence informing base-year company-share estimates: Describes metal-detection, X-ray and weighing offerings; the active-retention adjustment, annual purchase conversion, food mix and equipment values are modeled rather than observed.
68. Lock Inspection - The History - Loma Systems
    - Evidence informing base-year company-share estimates: Identifies Loma as an ITW division and records its 2012 acquisition of Lock Inspection.
    - Evidence informing base-year company-share estimates: Supports including the commercially continuous Lock business within Loma rather than adding a duplicate independent numerator.
69. Anritsu - Financial Results for the Nine Months Ended December 31, 2025
    - Evidence informing base-year company-share estimates: Reports PQA revenue of JPY xx.xx for January-March 2025 and JPY xx.xx, xx.xx and xx.xx for the following quarters. Their rounded-million sum anchors the calendar-2025 bridge.
    - Evidence informing base-year company-share estimates: Identifies mixed PQA products including weighing and inspection equipment; the final food-safety attribution remains modeled.
70. Anritsu Integrated Report 2025 - Financial Statements
    - Evidence informing base-year company-share estimates: Reports PQA product revenue of JPY xx.xx and service revenue of JPY xx.xx for the year ended March xx.xx 2025.
    - Evidence informing base-year company-share estimates: Supports the product/service exclusion ratio used as a calendar-year proxy, not the assumed food or safety percentages.
71. Testo verzeichnet Wachstum von 2,8 Prozent inmitten deutscher Rezession
    - Evidence informing base-year company-share estimates: Reports 2024 group revenue of EUR xx.xx and revenue mix of xx.xx% Instrumentation and xx.xx% Solutions.
    - Evidence informing base-year company-share estimates: Provides the divisional starting values; food and hardware attribution are explicit assumptions rather than reported percentages.

72. Testo blickt auf ein solides Geschäftsjahr 2025 zurück
    - Evidence informing base-year company-share estimates: Reports 2025 Instruments growth of xx.xx%, Saveris growth of xx.xx%, group revenue of EUR xx.xx and Industrial Services revenue of EUR xx.xx.
    - Evidence informing base-year company-share estimates: Updates the calendar-2025 divisional bridge and qualifies extrapolation of earlier Solutions weakness; it does not disclose food-only hardware revenue.
73. Digital Food Safety Management with testo Saveris Food
    - Evidence informing base-year company-share estimates: Describes Saveris Food as a hardware, software and services offering and reports xx.xx active sensors across more than xx.xx environments.
    - Evidence informing base-year company-share estimates: The undated installed-stock observations support commercial scope only; they are not treated as calendar-2025 shipments or annual revenue.
74. Food Thermometers - Testo
    - Evidence informing base-year company-share estimates: Separately markets food thermometers, including testo xx.xx-IR, for professional kitchens, restaurants and supermarkets.
    - Evidence informing base-year company-share estimates: Supports standalone equipment participation without assuming purchase of a software-and-service bundle.

17.2. Market Concentration Analysis, 2025

Control over the commercial relationship is more informative than the number of supplier names. ■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■ ■■■■■ ■■■ ■■■■■■■ ■■■ ■■■■■ ■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■ ■■ ■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■■■■■■ ■■■ ■■■■■■ ■■■■ ■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■ ■■■■■■■■ ■■■■■■■ ■■■■■■■■■ ■■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■ ■■ ■ ■■■■■■■■ ■■■■ ■■■■■ ■■■■■■■■ ■■■■ ■■■■■■■ ■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■■■ ■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■■■■ ■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■■ ■■ ■■■ ■■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■ ■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■ ■■■■ ■■■■■■■■ ■■■■■■■■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■■ ■■■■ ■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■■ PerkinElmer's analytical business is identified by New Mountain Capital as a controlled investment, requiring separation from assumptions based on the former public-company identity.

Brand relationships can also conceal different business roles without establishing common ownership. ProGnosis Biotech markets Byonoy equipment under a partnership and describes reader supply through its Lateral Logic subsidiary. ■■■■ ■■ ■■■■■■■■■ ■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■■ ■■■■■ ■■■■■ ■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■ ■■■ ■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■ ■■ ■■■■■ ■■■ ■■■■■ ■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■■■ ■■■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■■■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■ ■■ ■■■■■■■■■■■■■■■ ■■ ■■■■■■■ ■■■■■■■■■■■■ ■■ ■■■ ■■■■■ ■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■ ■■■ ■ ■■■■■ ■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■ ■■■■■■■■ ■■■■■■■■ ■■ ■■■ ■■■■■■■■■■■■ ■■■■■ ■■■■■ ■■■ ■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■ ■■■■■■■■■■■■ ■■■■■■■■

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[redacted] Buyers comparing Microsep and National Separations should establish their present ownership and contracting relationship before treating them as independent sources. Local brand choice, contracting choice, and ownership diversification are different procurement objectives.

Installed equipment can create application and records dependencies, but original-manufacturer service dependence is not universal. bioMérieux advertises continuing GENE-UP support, whereas Agilent offers maintenance and repair for non-Agilent chromatography and mass-spectrometry instruments. [redacted]

Application acceptance remains a separate control point. [redacted] Conversely, a broader catalog or an additional reseller does not improve bargaining options when the accepted application or enforceable support package remains unmatched.

[redacted] Laboratory buyers should establish the accepted food-safety function, associated software and supplies, and accountable seller before treating these propositions as substitutes for an existing equipment relationship. A focused purchase can preserve suitable assets, but responsibility across retained and newly purchased equipment remains with the parties identified in the actual agreement.

Broad sector portfolios require a different attribution check. [redacted] Those configuration-specific facts remain necessary for a defensible comparison with a single-platform supplier.

Yarok Microbio Ltd. presents a developed microbiological testing system for fresh food, but its company description does not settle a standalone hardware offer, licensing arrangement, or buyer-specific delivery and support undertaking. A prospective customer should obtain the named offering and commercial model before treating the company as an executable equipment-replacement source. [redacted]

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Sources & Evidence

1. GENE-UP - bioMérieux

   · bioMérieux associates GENE-UP with application offerings and advertises instrument maintenance and repairs. These establish a supported application-and-service relationship, not universal exclusive servicing rights.
   ([biomerieux.com](https://www.biomerieux.com/corp/en/our-offer/industry-products/gene-up-automated-pathogen-detection.html))

2. Multi-Vendor Services - Agilent

   · Agilent offers repair, maintenance, and compliance support for non-Agilent chromatography and mass spectrometry instruments. The offering provides a counterforce to universal original-manufacturer service exclusivity; matched contractual coverage remains necessary.
   ([agilent.com](https://www.agilent.com/en/s/maintenance-repair/service-plans/multi-vendor))

3. FGIS Performance Verified Aflatoxin Test Kits

   · FGIS associates named readers and software with specified tests and commodities. Its entries establish bounded application pairings rather than universal hardware acceptance, supporting comparison of complete accepted alternatives.
   ([ams.usda.gov](https://www.ams.usda.gov/sites/default/files/media/FGISApprovedMycotoxinRapidTestKits.pdf))

4. DKSH and Hygiena® Expand Partnership to Deliver Food Safety and Health Diagnostics Solutions in Malaysia

   · The January xx.xx 2025 Malaysian announcement assigns DKSH marketing, sales, distribution, and after-sales functions for Hygiena offerings including ATP cleaning-verification systems. It establishes a documented channel role rather than separate manufacture of those systems.
   ([dksh.com](https://www.dksh.com/my-en/home/media/news/dksh-and-hygiena-expand-partnership-to-deliver-food-safety-and-health-diagnostics-solutions-in-malaysia))

5. Driving Market Expansion for Hygiena’s Diagnostic Solutions in Southeast Asia

   · DKSH's August xx.xx 2025 account describes country- and sector-specific Hygiena appointments, including food-and-beverage coverage in Sumatra rather than throughout Indonesia. Continuing appointment rights remain a transaction-specific verification condition.
   ([lab-solutions.dksh.com](https://lab-solutions.dksh.com/insights/driving-market-expansion-for-hygienas-diagnostic-solutions-in-southeast-asia/))

6. Equipment - ProGnosis Biotech

   · ProGnosis Biotech identifies Lateral Logic as its subsidiary and as the manufacturer of S-FLOW. It separately advertises Byonoy Absorbance xx.xx under a partnership, establishing different relationships between marketer and underlying equipment supplier.
   ([prognosis-biotech.com](https://www.prognosis-biotech.com/equipment/))

7. Lumitester Smart - OPTEX

   · OPTEX identifies Lumitester Smart as co-developed with Kikkoman Biochemifa and explicitly states that OPTEX does not sell it. Co-development therefore does not establish an alternative end-customer seller.
   ([optex.co.jp](https://www.optex.co.jp/products/water-quality-measurement/development/smart.html))

8. About Romer Labs

   · Romer Labs describes its affiliation with dsm-firmenich. That corporate description does not independently establish a transaction-specific transfer or contractual succession.
   ([romerlabs.com](https://www.romerlabs.com/gb_en/about-romer-labs))

9. Analytical Standards & Reagents - Waters

   · Waters identifies VICAM among its brands, supporting separation of brand choice from ownership diversification. ([waters.com](https://www.waters.com/nextgen/en/products/standards-and-reagents.html))

10. Advanced Automation Technologies (AAT) to Rebrand Under New Name - Velaris

· The January xx.xx 2026 Velaris announcement identifies GERSTEL and LCTech within the laboratory-automation platform's acquired company portfolio. Different market-facing names therefore do not establish ownership-diversified sources. ([lctech.de](https://www.lctech.de/hubfs/PR_VelarisGroup_050126%xx.xx%xx.xx%xx.xx.pdf?hsLang=de))

11. LCTech Becomes a Product Line Within the GERSTEL Brand

· GERSTEL's customer notice announces integration of LCTech as a product line. It states that LCTech GmbH will remain the legal entity and that the product portfolio, contacts, service, support, ordering processes, and business relationships will remain unchanged. These are announced continuity commitments, not proof of each customer's contractual performance. ([lctech.de](https://www.lctech.de/hubfs/LCTech-and-GERSTEL.pdf?hsLang=en))

12. Novonesis Annual Report 2024

· Novonesis' annual report records completion of the Novozymes-Chr. Hansen statutory merger on January xx.xx 2024, supporting successor-sensitive treatment of CHR Hansen. ([backend.novonesis.com](https://backend.novonesis.com/sites/default/files/document/2025-xx.xx/Novonesis_Annual_Report_2024.pdf))

13. Incubators and Readers - Novonesis

· Novonesis advertises milk-testing incubators and readers and describes their connection with the MilkSafe records environment. This establishes successor-group equipment context, not an independent contemporary CHR Hansen supplier. ([novonesis.com](https://www.novonesis.com/en/biosolutions/food-and-beverages/dairy/milk/more-inputs/incubators-and-readers))

14. PerkinElmer - New Mountain Capital

· New Mountain Capital identifies PerkinElmer as a current controlled private-equity investment and describes its analytical-instrument and laboratory-services business. This supports distinguishing the operating business from assumptions based on its former public-company identity. ([newmountaincapital.com](https://www.newmountaincapital.com/portfolio/perkinelmer/))

15. IUL OEM

· IUL advertises an OEM business helping other companies obtain instruments. The offering establishes a commercial inquiry route, not a particular customer's branding rights, territory, supply agreement, or warranty undertaking. ([iul-instruments.com](https://iul-instruments.com/iul-oem/))

16. Products - SY-LAB

· SY-LAB's instrument catalog lists BacTrac xx.xx and BioTrac xx.xx within Electric Microbiology. The catalog establishes named advertised instruments, not a buyer's application acceptance or destination-specific supply commitment. ([microbiology.sylab.com](https://microbiology.sylab.com/products/p/list/Product/category/mikro-category.html))

17. Food & Nutrition - Copan

· Copan's Food & Nutrition portfolio identifies CYCLONE as an automated microbiological quality-control offering. This establishes a food-linked equipment proposition without proving suitability for every food-safety deliverable. ([copangroup.com](https://www.copangroup.com/industrial-world/food-nutrition/))

18. Food, Agricultural & Environmental - Labindia Instruments

· Labindia Instruments' Food, Agricultural & Environmental catalog combines Labindia-branded LABORAM analyzers with named third-party instruments, including Agilent Cary equipment. Catalog breadth does not independently establish manufacture of every item or a matched food-safety configuration. ([labindiainstruments.com](https://www.labindiainstruments.com/application-and-industry-details/xx.xx/food-agricultural-environmental))

19. Food and Beverage Testing Solutions - Molecular Devices

· Molecular Devices' Food & Beverage page addresses quality, authenticity, and safety together. That page supports broad application positioning, not a particular food-safety instrument configuration or its purchasing and support terms. ([moleculardevices.com](https://www.moleculardevices.com/applications/food-and-beverage))

20. Company - Yarok Microbio
    - Yarok Microbio Ltd.'s company description states that it developed a microbiological testing system for fresh food. That description does not settle a standalone hardware offer, licensing arrangement, or buyer-specific delivery and support undertaking. ([yaroktt.com](https://www.yaroktt.com/company))

17.3. Recent Developments & Impact Analysis, 2025

Distribution developments changed the commercial route more directly than the underlying equipment alternatives. ■■■ ■■■■■■■ ■■■ ■■■■ ■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■■ ■■ ■■■■■ ■■■ ■■■■■■ ■■■ ■■■■ ■■■■■■■ ■■■■■■■ ■■■■■■■■■■■■■ ■■■■■■■ ■■■ ■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■ ■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■■■■■■ ■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■ ■■■■■■ ■■ ■ ■■■■ ■■■ ■■■■■■■■■■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■ ■■■■ ■■■■■■■■■ ■■ ■■■ ■■■■■■■■■■■ ■■■■■■ ■■■■■■■■■ ■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■■■■ ■■ ■■ ■■■■■■■■■■ ■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■ ■■■ ■ ■■■■■ ■■ ■■■■■■■■■■■ ■■■■■■■ ■■■■■■■ ■■■■■■■ Continuing appointment rights still require confirmation.

Luminultra's September xx.xx 2025 announcement of a North American Kikkoman Biochemifa distribution agreement similarly added a commercial route for hygiene-monitoring and colony-counting offerings. ■■ ■■■ ■■■ ■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■■■■■■■■■ ■ ■■■■■■ ■■ ■■■■■■■ ■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■■■■■ The agreement's purchasing significance depends on those local undertakings, not on an assumed technology-replacement advantage.

■■■■■■■■■■■■■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■ ■ ■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■ ■■■■■■■ ■■ ■■■■■■■ ■■■ ■■■■■■ This supports continued certificate coverage within the named systems and application scope; it is not a new instrument launch or blanket approval of every food-microbiology use. Laboratories considering confirmation equipment should use the applicable certificate and accepted deliverable as shortlist conditions while treating destination-specific supply and support separately.

Ownership announcements must not be converted into completed competitive consolidation. On February xx.xx 2026, dsm-firmenich announced an agreement to divest Animal Nutrition & Health to CVC, with completion expected at the end of 2026 subject to conditions. ■■■■ ■■■■■■■■■■■■ ■■ ■■■ ■ ■■■■■■■■■■■■■■■■■■ ■■■■■■ ■■■ ■■■■ ■■■ ■■■■■■■■■■■■■ ■■■■■■■ ■■■■■ ■■■■■■■■■■■■■ ■■■■■■■ ■■ ■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■■ ■■■ ■■■■■ ■■■■ ■■■■■■■ ■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■ ■■■ ■■■ ■■■■■■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■■■■■■ ■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■■■ ■■■ ■■ ■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■■■■■■■■■■■■■■ ■■ ■■■■■■■■■■■■ ■■■■■■■■■■■

Sources & Evidence

1. MicroVal Certificate of Compliance 2017LR75 - MALDI Biotyper Listeria Confirmation
   · The certificate records renewal on January xx.xx 2026; it does not establish a new product launch or universal food-microbiology approval. ([assets.eu.bettyblocks.com](https://assets.eu.bettyblocks.com/eu-central-xx.xx-2e826c3765f4401c84671a06de961fc7/7ec88453307c4ce7af6f9258f9645792/xx.xx/2017LR75_-_MALDI_Biotyper_Listeria_Mono_and_spp._renewal__2026_-_2030_.pdf))
2. DKSH and Hygiena® Expand Partnership to Deliver Food Safety and Health Diagnostics Solutions in Malaysia
   · The dated announcement establishes the Malaysian commercial-route change, not indefinite appointment rights or buyer-specific fulfillment. ([dksh.com](https://www.dksh.com/my-en/home/media/news/dksh-and-hygiena-expand-partnership-to-deliver-food-safety-and-health-diagnostics-solutions-in-malaysia))
3. Driving Market Expansion for Hygiena's Diagnostic Solutions in Southeast Asia
   · The dated account qualifies regional generalization of the Malaysian partnership. ([lab-solutions.dksh.com](https://lab-solutions.dksh.com/insights/driving-market-expansion-for-hygienas-diagnostic-solutions-in-southeast-asia/))
4. About Romer Labs
   · The stated affiliation does not establish transaction-specific closing or contract succession. ([romerlabs.com](https://www.romerlabs.com/gb_en/about-romer-labs))
5. Luminultra and Kikkoman Partnership: Food Safety Testing
   · Luminultra announced a North American Kikkoman distribution agreement on September xx.xx 2025, covering hygiene-monitoring and colony-counting offerings. ([luminultra.com](https://www.luminultra.com/resource/luminultra-kikkoman-partnership/))
6. dsm-firmenich Announces Agreement to Divest Animal Nutrition & Health to CVC Capital Partners
   · The February xx.xx 2026 announcement describes an agreed Animal Nutrition & Health divestment to CVC, expected to complete at the end of 2026 subject to conditions; it is not closing evidence. ([dsm-firmenich.com](https://www.dsm-firmenich.com/content/dam/dsm-firmenich/corporate/documents/our-company/news/press-releases/2026/xx.xx/press-release-dsm-firmenich-announcement-divestment-anh-xx.xx.pdf))

17.4. Product Portfolio Analysis, 2025

Food Safety Testing Equipment competition is organized around different purchasing requirements, not interchangeable supplier catalogs. ■■■■■■ ■■■■■■ ■■■■■■■■■■ ■■■■ ■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■■■ ■■■■■ ■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■ ■■■■■■■■■■ ■■■■ ■■ ■■■■■■■■ ■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■■■ ■■■■ ■■■ ■■■■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■ ■■■■■■■■■ ■■ ■■■■■■■■ ■■■■■■■■■■■■ A laboratory seeking procurement consolidation should compare the actual equipment package rather than attribute every supplier's food-quality and authenticity business to safety testing.

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RESEARCH SAMPLE REPORT

[illegible] These suppliers expand the available analytical approaches, but a shared food-sector label does not make pesticide, elemental-contaminant, and preventive-condition instruments substitutes. Lumex Instruments' RA-xx.xx Lab provides a dedicated mercury-analysis proposition that should be compared against a defined mercury requirement rather than an entire multipurpose laboratory platform.

[illegible] Buyers should establish whether the acquisition must deliver detection, identification, confirmation, or characterization before comparing platforms. Purchasing an additional identification capability need not require replacing an otherwise suitable detection system.

Supporting molecular equipment is a separate investment category. [illegible] The buyer must allocate responsibility for the complete equipment relationship and accepted application, particularly when preparation and detection are sourced separately.

Reader competition combines specialist test families, software relationships, and differing automation levels. [illegible] These offerings create different procurement options, but platform availability alone does not establish an accepted pairing for a particular commodity or customer.

Dairy buyers face distinct measurement and residue-screening choices. [illegible] Raw-milk bacterial information and

antibiotic-residue evidence support different intake decisions; neither should be purchased on the assumption that it replaces the other.

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Supporting microbiology portfolios permit selective investment. ■■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■■ ■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■ ■■ ■■■■■■■■ ■■■ ■■■■■ ■■■■■■ ■■■■ ■■■■■■■■■■■■ ■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■ ■■■■■■ ■■■■■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■■■■■■■■■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■■ ■■■■■■■■■■■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■ ■■■ ■■■■■ ■■■■■■■■■■■■■■ Laboratories can therefore investigate renewal of a specific supporting function without assuming a complete analyzer replacement, provided retained equipment remains suitable.

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Hygiene verification and preventive monitoring should not be combined into one substitution pool. Hygiena markets EnSURE Touch with optional connected analysis; Kikkoman Biochemifa

Company's Lumitester Smart is a co-developed hygiene instrument; and Tianlong markets Biolum for food-processing and catering settings. [redacted]

[redacted] Diamidex addresses microbial monitoring in bottled-water and fruit-juice settings. Those propositions should be compared against the buyer's required water-related evidence and reporting relationship, not presumed equivalent to food-product pathogen testing or general water-treatment instrumentation.

Sources & Evidence

1. Food and Beverage - Thermo Fisher Scientific
   • Thermo Fisher's food-and-beverage portfolio spans analytical, molecular, supporting laboratory, and inspection offerings; food-quality applications require separate attribution. ([thermofisher.com](https://www.thermofisher.com/us/en/home/industrial/food-beverage.html))
2. Products and Accessories - Microbiology
   • Interscience separately lists preparation and reading functions alongside combined ScanStation equipment. ([interscience.com](https://www.interscience.com/en/products/))
3. Digital Food Safety Management with testo Saveris Food
   • Testo's UK Saveris Food offer combines monitoring equipment, software, and services. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
4. EnSURE Touch ATP Luminometer for Hygiene Monitoring
   • Hygiena markets EnSURE Touch for cleaning verification and describes advanced connected analysis as optional. ([hygiena.com](https://www.hygiena.com/hygiene-monitoring/atp-cleaning-verification/ensure-touch/hygiena-ensure-touch))
5. GENE-UP - bioMérieux
   • GENE-UP is a marketed PCR platform for food-related applications. ([biomerieux.com](https://www.biomerieux.com/corp/en/our-offer/industry-products/gene-up-automated-pathogen-detection.html))
6. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
   • The announcement identifies MDS as an isothermal amplification platform, supporting the platform distinction. ([investors.neogen.com](https://investors.neogen.com/news/news-details/2024/Neogen-MDS-Awarded-Contract-from-USDA-Food-Safety-and-Inspection-Service-xx.xx-xx.xx-2024/default.aspx))
7. VIDAS KUBE - bioMérieux
   • bioMérieux presents VIDAS KUBE as an automated immunoassay food-pathogen instrument, distinct from GENE-UP PCR. ([biomerieux.com](https://www.biomerieux.com/us/en/our-offer/industry-products/Vidas-kube-automated-food-pathogen-detection.html))

8. Food Safety Contract Lab Solutions - Neogen
   · Neogen markets its Molecular Detection System within a food-testing contract-laboratory proposition. ([engage.neogen.com](https://engage.neogen.com/contract-labs-en-usac/))
9. 6546 LC/Q-TOF - Agilent
   · Agilent markets xx.xx LC/Q-TOF for food-safety screening and associated contaminant applications, supporting a bounded analytical comparison. ([agilent.com](https://www.agilent.com/en/product/liquid-chromatography-mass-spectrometry-lc-ms/lc-ms-instruments/quadrupole-time-of-flight-lc-ms/xx.xx-lc-q-tof))
10. MALDI Biotyper for Food Microbiology - Bruker
    · Bruker markets MALDI Biotyper for food-microbiology identification and confirmation, supporting a deliverable-specific comparison. ([bruker.com](https://www.bruker.com/en/applications/microbiology-and-diagnostics/food-beverage-microbiology/maldi-biotyper-for-food-microbiology.html))
11. FGIS Performance Verified Aflatoxin Test Kits
    · FGIS lists reader-associated applications from Charm, EnviroLogix, Romer, R-Biopharm, ProGnosis, and VICAM. ([ams.usda.gov](https://www.ams.usda.gov/sites/default/files/media/FGISApprovedMycotoxinRapidTestKits.pdf))
12. BacSomatic - FOSS
    · FOSS markets BacSomatic for bacterial and somatic-cell information in raw-milk hygienic-quality assessment. ([fossanalytics.com](https://www.fossanalytics.com/en/products/bacsomatic))
13. Advanced Microbiological Testing Solutions for Contamination Control and Product Quality - Sartorius
    · Sartorius markets sampling and filtration instruments for food, beverage, and water microbiology laboratories. ([sartorius.com](https://www.sartorius.com/en/products/microbiological-testing/instruments))
14. Mix and Match Your Ideal Combination Inspection System
    · METTLER TOLEDO markets standalone and combination inspection systems, supporting a package-accountability comparison rather than automatic end-to-end responsibility. ([mt.com](https://www.mt.com/us/en/home/library/product-brochures/product-inspection/PI/Combinations_Brochure.html))
15. Professional Foodcare Portable pH Meter - HI98161
    · Hanna markets HI98161 as a Foodcare pH instrument with stored records and computer transfer. ([hannainst.com](https://hannainst.com/hi98161-portable-foodcare-ph-meter.html))
16. The FREESTYLE Robotic System - LCTech
    · LCTech markets FREESTYLE preparation automation for food-contaminant applications; downstream equipment replacement is not established by that offering. ([lctech.de](https://www.lctech.de/en/products/robotic-systems))
17. BIOFISH 3000 HIS - BIOLAN
    · BIOLAN markets BIOFISH for fish histamine, a dedicated target-and-matrix proposition. ([biolanmb.com](https://biolanmb.com/en/biofish-xx.xx-his/))
18. Food Contaminant Testing - Waters
    · Waters presents Xevo and APGC equipment within its food-contaminant testing proposition. ([waters.com](https://www.waters.com/nextgen/us/en/c/promo/food-contaminant-testing-reliable-lc-ms-ms-gc-ms-ms.html))
19. Solutions for Food Safety - Shimadzu
    · Shimadzu links named LCMS instruments with pesticide, veterinary-drug, toxin, and other food-safety applications. ([shimadzu.com](https://www.shimadzu.com/an/news-events/campaign/xx.xx/solutions_for_food_safety.html))
20. Food Testing Solutions - SCIEX
    · SCIEX markets mass-spectrometry systems, associated software, and services for food-contaminant and residue analysis. ([sciex.com](https://sciex.com/landing-pages/food-testing-solutions))

21. Food Testing Solutions - PerkinElmer
    - PerkinElmer markets elemental, GC, and LC/MS/MS offerings for food testing, including contaminant applications alongside quality uses. ([contact.perkinelmer.com](https://contact.perkinelmer.com/food-testing-solutions-landing-page))
22. Determination of Pesticides in Tomato by GCxGC-TOFMS - LECO
    - LECO associates Pegasus BT equipment with pesticide analysis in tomatoes; the source supports application participation, not comparative superiority. ([leco.com](https://www.leco.com/documents/xx.xx-xx.xx-xx.xx/))
23. Pesticides - JEOL Ltd.
    - JEOL presents JMS-TQ4000GC UltraQuad TQ for residual-pesticide analysis in food. ([jeol.com](https://www.jeol.com/solutions/environment/pesticides.php))
24. Gas Chromatograph Mass Spectrometer - Jiangsu Skyray Instrument
    - Jiangsu Skyray's GC-MS xx.xx catalog identifies food-safety and pesticide-residue applications. ([en.skyray-instrument.com](https://en.skyray-instrument.com/product/detail/xx.xx/xx.xx))
25. Food & Agriculture - Analytik Jena
    - Analytik Jena's food-and-agriculture portfolio includes elemental-analysis instruments and other laboratory equipment. ([analytik-jena.us](https://www.analytik-jena.us/industries-solutions/industries/food-agriculture/))
26. Food Analysis - Hitachi High-Tech Analytical Science
    - Hitachi High-Tech Analytical Science positions XRF equipment for food-contaminant analysis alongside quality applications. ([hha.hitachi-hightech.com](https://hha.hitachi-hightech.com/en/product-range/applications/food))
27. Food & Beverages - Elico
    - Elico's food-and-beverage offering identifies analytical equipment and contaminant or adulteration applications. ([elico.co](https://www.elico.co/food-beverages))
28. Food and Beverage - Metrohm
    - Metrohm offers analytical equipment to food-and-beverage laboratories and expressly addresses contaminants. ([metrohm.com](https://www.metrohm.com/en/industries/food-and-beverage.html))
29. RA-915 Lab - Lumex Instruments
    - Lumex markets RA-xx.xx Lab as dedicated mercury-analysis equipment with food applications. ([lumexinstruments.com](https://www.lumexinstruments.com/catalog/atomic-absorption-spectrometry/ra_915_lab.php))
30. ICGENE Mini - Enbiotech
    - Enbiotech markets ICGENE Mini and identifies food applications. ([enbiotech.eu](https://www.enbiotech.eu/eng/prodotti/icgene-mini/))
31. XDive Instrument - Star Array Pte. Ltd.
    - Star Array markets XDive, identifies food-safety applications, and presents an OEM proposition. ([star-array.com](https://www.star-array.com/xdive))
32. Products - Biolog
    - Biolog markets Odin and ID Station for identification and characterization and identifies food-and-beverage users. ([biolog.com](https://www.biolog.com/products/))
33. Food Testing - Promega
    - Promega's food-testing portfolio connects Maxwell equipment with food-related laboratory applications. ([promega.com](https://www.promega.com/applications/applied-sciences/food-testing/))
34. Food Safety - TANBead Application & Support
    - TANBead identifies Taiwan Advanced Nanotech and markets automated extraction instruments for food-safety applications. ([tanbead.com](https://www.tanbead.com/en/application/project/page/FoodSafety))
35. Food Safety Product List - Anatolia Geneworks
    - Anatolia Geneworks' food-safety catalog lists UNIO M32 extraction equipment. ([anatoliageneworks.com](https://www.anatoliageneworks.com/wp-content/uploads/2025/xx.xx/Food-Safety-Product-List-2025_v6.pdf))

36. Equipment - ProGnosis Biotech
    - ProGnosis markets Byonoy Absorbance xx.xx under a partnership and describes reader supply through Lateral Logic. ([prognosis-biotech.com](https://www.prognosis-biotech.com/equipment/))
37. About Gold Standard Diagnostics
    - Gold Standard Diagnostics identifies food-related diagnostics and commercially lists automated assay analyzers and other instruments. ([goldstandarddiagnostics.com](https://www.goldstandarddiagnostics.com/about-us.html))
38. Portable Food Safety Reader - Kwinbon
    - Beijing Kwinbon markets a Portable Food Safety Reader under its own equipment catalog. ([kwinbonbio.com](https://www.kwinbonbio.com/elisa-microplate-reader-product/))
39. 手持金标检测仪 - 山东海曼科学仪器有限公司
    - The company-branded catalog advertises LD-JD01 and identifies 山东海曼科学仪器有限公司; manufacturing attribution is not established. ([anyuyq.com](https://www.anyuyq.com/sycl/xx.xx.html))
40. Feyond-S400 - Allsheng
    - Allsheng's Feyond-S400 commercial page includes food safety among its applications. ([allsheng.com](https://www.allsheng.com/products-details-xx.xx))
41. Bioeasy ReadEasy - Bentley Instruments
    - Bentley presents bacterial-counting equipment in its portfolio and separately markets Bioeasy ReadEasy. ([bentleyinstruments.eu](https://www.bentleyinstruments.eu/en-bioeasy-readeasy/))
42. SNAPshot DSR Reader - IDEXX
    - IDEXX markets SNAPshot DSR Reader within its dairy-test and records ecosystem and provides an ordering route. ([idexx.com](https://www.idexx.com/en/milk/dairy-tests/accessories/snapshot-dsr-reader/))
43. Delvotest - dsm-firmenich
    - dsm-firmenich's Delvotest portfolio includes associated reading and automation equipment for dairy antibiotic-residue testing. ([dsm-firmenich.com](https://www.dsm-firmenich.com/en/businesses/taste-texture-health/markets-products/dairy/fresh-dairy-non-fermented/delvotest.html))
44. Drug Residue & Contamination Testing for Food Diagnostics - Unisensor
    - Unisensor identifies its own food-diagnostics portfolio for antibiotic residues, mycotoxins, and other contamination concerns. ([unisensor.be](https://unisensor.be/en/))
45. Fish & Seafood - BioSystems
    - BioSystems markets Y15 for fish-and-seafood analysis, including histamine and sulfites. ([biosystems.global](https://biosystems.global/service/food-beverage-analysis/food-beberage-analysis-fish-seafood))
46. AAA 500 - INGOS s.r.o.
    - INGOS markets AAA xx.xx for applications including biogenic amines and food/feed control. ([ingos.cz](https://www.ingos.cz/aaa500-xx.xx))
47. Company - IUL
    - IUL describes microbiology automation and an explicit OEM business. ([iul-instruments.com](https://iul-instruments.com/company/))
48. About Seward
    - Seward identifies its Stomacher laboratory-blender business and food-microbiology applications. ([seward.co.uk](https://www.seward.co.uk/about-seward/))
49. Food & Beverage Safety Portfolio - Merck
    - Merck KGaA's portfolio includes preparation, filtration, and environmental-monitoring instruments for food-and-beverage safety laboratories. ([merckmillipore.com](https://www.merckmillipore.com/deepweb/assets/sigmaaldrich/marketing/global/documents/xx.xx/xx.xx/food-and-beverage-safety-br13419en-mk.pdf))

50. Food Industry - Alliance Bio Expertise
    - Alliance Bio Expertise markets named preparation and sampling equipment to food-industry laboratories. ([alliance-bio-expertise.com](https://www.alliance-bio-expertise.com/en/food-industry/))
51. Synbiosis - Synoptics
    - Synoptics presents Synbiosis colony-counting equipment and food-testing customer context. ([synoptics.co.uk](https://www.synoptics.co.uk/synbiosis/))
52. 50 Years of Culturing Innovation - Don Whitley Scientific
    - Don Whitley Scientific describes microbiology automation offerings serving food and water laboratories. ([dwscientific.com](https://www.dwscientific.com/blog/xx.xx-years-culturing-innovation))
53. About Axel Semrau
    - Axel Semrau presents CHRONECT automation and food-contaminant application categories. ([axelsemrau.de](https://www.axelsemrau.de/en/the-company/about-axel-semrau))
54. Automated Liquid-Liquid Extraction Systems - Aurora Biomed
    - Aurora Biomed markets VERSA preparation equipment with food-related applications. ([aurorabiomed.com](https://www.aurorabiomed.com/automated-liquid-liquid-extraction-lle-systems/))
55. Applied Markets - Food - Tecan
    - Tecan markets automation for food-related applied markets; a buyer-specific configuration remains a separate commercial requirement. ([lifesciences.tecan.com](https://lifesciences.tecan.com/applications_and_solutions/applied_markets?p=Food))
56. Analytical Chemistry - Hamilton Company
    - Hamilton's analytical-chemistry automation proposition includes food safety, without establishing every buyer's configured package. ([hamiltoncompany.com](https://www.hamiltoncompany.com/applications/analytical-chemistry))
57. Multiwave - Anton Paar
    - Anton Paar markets Multiwave analytical-preparation equipment with food-related application categories. ([anton-paar.com](https://www.anton-paar.com/corp-en/products/details/multiwave/))
58. Dymond - Minebea Intec
    - Minebea Intec markets Dymond X-ray inspection equipment for packaged-food foreign-object inspection. ([minebea-intec.com](https://www.minebea-intec.com/en/inspection-solutions/sideshooters-x-ray/x-ray-inspection-system-dymond))
59. X-Ray Inspection - Loma Systems
    - Loma markets X5 food X-ray inspection systems. ([loma.com](https://www.loma.com/en-US/Products/X-Ray-Inspection))
60. X-Ray Inspection Systems for Food & Pharmaceutical Products - Anritsu
    - Anritsu markets X-ray inspection equipment for food and pharmaceutical products. ([anritsu.com](https://www.anritsu.com/en-us/product-inspection/products/x-ray-inspection-systems/))
61. X-Ray Inspection Systems - Ishida
    - Ishida markets IX-series food X-ray inspection systems. ([ishida.com](https://www.ishida.com/ww/en/products/inspection/xray/))
62. MEKI Compact Food X-Ray Inspection System - Mekitec
    - Mekitec markets MEKI food X-ray inspection equipment. ([mekitec.com](https://mekitec.com/solutions/meki))
63. Interceptor Metal Detector - Fortress Technology
    - Fortress markets Interceptor metal detection for food applications. ([fortresstechnology.com](https://fortresstechnology.com/solutions/interceptor-metal-detector/))
64. AD-4976 Metal Detector - A&D
    - A&D markets AD-xx.xx metal-detection equipment; the page establishes hardware rather than a buyer-specific installation undertaking. ([aandd.jp](https://www.aandd.jp/products/inspection_systems/metaldetector/ad4976.html))

65. Quem Somos - Detectores Brasil
    - Detectores Brasil describes manufacturing metal-detection equipment for food and other sectors. ([detectoresbrasil.com.br](https://detectoresbrasil.com.br/quem-somos/))
66. Hakkımızda - Atabey Teknik
    - Atabey Teknik describes a food metal-detector manufacturing proposition; this does not resolve every similarly named legal entity. ([atabeyteknik.com](https://atabeyteknik.com/hakkimizda/))
67. Lumitester Smart - OPTEX
    - OPTEX identifies Lumitester Smart as co-developed with Kikkoman Biochemifa. ([optex.co.jp](https://www.optex.co.jp/products/water-quality-measurement/development/smart.html))
68. Biolum Handheld ATP Instrument - Tianlong
    - Tianlong markets Biolum hygiene-monitoring equipment for food-processing and catering applications. ([medtl.com](https://www.medtl.com/products/instruments/other/xx.xx.html))
69. N-Light ATP - NEMIS Technologies
    - NEMIS presents a luminometer-associated food-industry environmental-monitoring platform. ([nemistech.com](https://www.nemistech.com/products/atp-test/))
70. Equipment - Promicol
    - Promicol markets PROMILITE equipment for its microbial ATP product-screening portfolio, supporting distinction from handheld cleaning verification. ([promicol.com](https://www.promicol.com/equipment/))
71. Food Processing - ThermoWorks
    - ThermoWorks markets professional food-processing temperature instruments, including records-oriented equipment. ([thermoworks.com](https://www.thermoworks.com/collections/food-processing))
72. Company Overview - DeltaTrak
    - DeltaTrak describes portable temperature instruments, data loggers, and monitoring systems serving food and food safety. ([deltatrak.com](https://deltatrak.com/about-us/company-overview/))
73. HACCP - ATAGO
    - ATAGO markets measurement instruments, including pH categories, for HACCP-related food hygiene management. ([atago.net](https://www.atago.net/en/haccp.php))
74. Indústria Alimentícia - AKSO
    - AKSO's food-industry catalog includes pH and related measurement equipment; safety attribution remains application-specific. ([akso.com.br](https://akso.com.br/industria-alimenticia/))
75. About - Addium Inc.
    - Addium identifies its AQUALAB business and food-safety role, supporting water-activity procurement context without establishing an individual model offer. ([addium.io](https://addium.io/company/about))
76. Use Cases - ColiMinder
    - ColiMinder identifies beverage production among its microbial water-monitoring applications; this is supplier-reported application context. ([coliminder.com](https://www.coliminder.com/use-cases/))
77. Bottled Water & Fruit Juice - Diamidex
    - Diamidex markets microbial monitoring to bottled-water and fruit-juice producers. ([diamidex.com](https://diamidex.com/applications/bottled-water-fruit-juice))

17.5. Benchmarking Analysis, 2025

Benchmarking should begin with the accepted deliverable and then compare the complete commercial package. [redacted]

[redacted] A supplier's broader marketed capability is not proof that every proposed use is covered.

[redacted] This is not evidence that Bio-Rad has exited food-safety equipment, but it makes the continuing compatible application menu a purchasing question rather than an assumption based on historical CFX food-testing materials. Buyers considering retention or replacement should obtain a product-specific continuity undertaking instead of generalizing either continued supply or discontinuation across the portfolio.

Connected-equipment benchmarking should distinguish records requirements from a compulsory software replacement. Hygiena describes advanced EnSURE Touch analysis as optional; Testo's Saveris Food offering combines equipment, software, and services; and Hanna's HI98161 provides a more limited computer-transfer proposition. [redacted]

Challenger comparisons require an executable business model as well as a marketed instrument. [redacted] These companies should be compared against the actual acquisition or external-fulfillment decision, not placed in an assumed hardware league table.

Broad molecular participation does not resolve a food-specific configuration. HiMedia Laboratories, Bioer Technology, GeneReach Biotechnology Corp., and OptiGene connect their businesses or instrument portfolios with food applications, but the presently offered food-specific package, associated application rights, and local support must be confirmed. [redacted]

[redacted]

[illegible] For Milestone, a contemporary DMA-xx.xx offer and support undertaking must be distinguished from historical customer references. These are configuration and commercial-continuity questions, not evidence that the accepted analytical categories are outside the market.

[illegible] FoodChek Systems Inc. and Bioavlee S.A. require current operating-supplier and marketed-equipment confirmation. A buyer should not rely on historical development activity as a replacement source, nor infer liquidation or nonparticipation from unresolved continuity.

Several specialist distinctions remain commercially consequential. [illegible] These unresolved facts limit substitution conclusions without changing the study's inclusion of dairy-related safety measurement, water applications, or production-line inspection.

Similar names must not substitute for an entity relationship. [illegible] Buyers and partners should obtain the named manufacturer, contracting seller, territorial authority, and support undertaking before treating these routes as either diversified sourcing or a unified regional relationship.

Latin American comparisons need to distinguish equipment sales, represented products, and aftermarket work. RELES S.R.[illegible]

[illegible] LabX Supplies FZCO requires separation of qualifying hardware from general equipment and supplies. These gaps prevent treating general scientific-supply presence as equivalent food-safety fulfillment.

African supplier comparison is also uneven at the executable-offer level. Katchey Company Limited, Precur Chem Technologies Limited, Medics & Procurement, Archiepollo Solutions Limited, and Chemoquip require the named offered instrument, continuing appointment where applicable, and destination-specific support commitment. [illegible] Moris Entreprises, Safetyaro, and Biolegend Scientific Ltd require identifiable food-safety hardware, the responsible manufacturer or supplier, and current fulfillment terms; broad water, hygiene, or dairy relevance does not settle those facts. These distinctions matter before consolidating purchases through a local supplier or treating several local catalogs as independent equipment alternatives.

Asia-Pacific channel breadth also needs package-level qualification. [illegible]

[redacted]

These are commercial verification gates, not evidence of lower competitive significance.

Sources & Evidence

1. Digital Food Safety Management with testo Saveris Food
   · The bundle establishes a broader records-and-support relationship than an isolated measurement instrument. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
2. EnSURE Touch ATP Luminometer for Hygiene Monitoring
   · Optional analysis is counterevidence to mandatory platform-wide software replacement; specific software rights and obligations still require confirmation. ([hygiena.com](https://www.hygiena.com/hygiene-monitoring/atp-cleaning-verification/ensure-touch/hygiena-ensure-touch))
3. MicroVal Certificate of Compliance 2017LR75 - MALDI Biotyper Listeria Confirmation
   · MicroVal's certificate names specified MALDI Biotyper systems for Listeria confirmation, supporting bounded application benchmarking. ([assets.eu.bettyblocks.com](https://assets.eu.bettyblocks.com/eu-central-xx.xx-2e826c3765f4401c84671a06de961fc7/7ec88453307c4ce7af6f9258f9645792/xx.xx/2017LR75_-_MALDI_Biotyper_Listeria_Mono_and_spp._renewal__2026_-_2030_.pdf))
4. FGIS Performance Verified Aflatoxin Test Kits
   · Named equipment pairings provide a bounded acceptance benchmark rather than approval of every marketed application. ([ams.usda.gov](https://www.ams.usda.gov/sites/default/files/media/FGISApprovedMycotoxinRapidTestKits.pdf))
5. Professional Foodcare Portable pH Meter - HI98161
   · The computer-transfer proposition is narrower than a complete centralized monitoring-and-records service. ([hannainst.com](https://hannainst.com/hi98161-portable-foodcare-ph-meter.html))
6. BIOFISH 3000 HIS - BIOLAN
   · The product description lists fish sauce as an application while excluding it from the stated AOAC certification coverage. ([biolanmb.com](https://biolanmb.com/en/biofish-xx.xx-his/))
7. Bioeasy ReadEasy - Bentley Instruments
   · The ReadEasy offering establishes a Bioeasy-branded relationship, not the precise legal linkage or ownership of similarly named captured companies. ([bentleyinstruments.eu](https://www.bentleyinstruments.eu/en-bioeasy-readeasy/))
8. iQ-Check Listeria monocytogenes II PCR Detection Kit - Bio-Rad
   · Bio-Rad's inspected iQ-Check Listeria monocytogenes II page marks that particular kit discontinued; it does not establish a company-wide exit. ([bio-rad.com](https://www.bio-rad.com/en-us/product/iq-check-listeria-monocytogenes-ii-pcr-detection-kit?ID=b5eaf877-xx.xx-481f-b1bd-c0bc4384b760))
9. SpectacularOne - Spectacular Labs
   · Spectacular Labs advertises SpectacularOne for onsite pathogen testing and provides a demonstration route; that does not independently establish shipments or acceptance. ([spectacularlabs.ca](https://www.spectacularlabs.ca/product/spectacular-one))
10. Inside Ancera's Labs
    · Ancera's November xx.xx 2024 account describes PIPER within its own poultry-focused operations; standalone sale, lease, or service-only fulfillment is not settled. ([ancera.com](https://www.ancera.com/post/inside-anceras-labs))

11. Molecular Biology - HiMedia Laboratories
    - HiMedia identifies molecular instruments and food/water applications at business-portfolio level, without settling the exact food-specific acquisition package. ([himedialabs.com](https://www.himedialabs.com/us/molecular-biology.html))
12. Digital PCR Instrument Brochure - Bioer Technology
    - Bioer's instrument brochure identifies food safety among business applications, supporting a configuration-verification need rather than universal food-package equivalence. ([en.bioer.com](https://en.bioer.com/uploadfiles/2025/xx.xx/xx.xx.pdf))
13. About GeneReach Biotechnology
    - GeneReach describes developing, manufacturing, and marketing equipment and reagents across multiple industries including food; the exact current food configuration remains separate. ([genereach.com](https://genereach.com/index.php?func=about))
14. About OptiGene
    - OptiGene identifies food safety, Genie instruments, and OEM variants, without establishing every current food-specific purchasing configuration. ([optigene.co.uk](https://www.optigene.co.uk/about/))
15. Genesystem Has Obtained AOAC Certification for Its Salmonella Assay
    - Genesystem's dated announcement links its Salmonella application to GENECHECKER UF-xx.xx; it is not a continuing-availability undertaking. ([genesystem.co.kr](https://genesystem.co.kr/en/board/news/read/xx.xx))
16. About CEM
    - CEM describes food-analysis and analytical-preparation businesses; the company overview does not settle a named food-contaminant package. ([cem.com](https://cem.com/en/company))
17. Food/Feed and Beverages Applications - KNAUER
    - KNAUER identifies food/feed chromatography and mycotoxin applications; application positioning does not establish a single executable equipment configuration. ([knauer.net](https://www.knauer.net/food-feed-beverages))
18. Food & Beverage - HORIBA
    - HORIBA's food-and-beverage portfolio includes spectroscopic and contaminant-related applications; a named buyer-specific safety configuration requires confirmation. ([horiba.com](https://www.horiba.com/sgp/life-science/applications/food-beverage/))
19. INSPECTO - Project Fact Sheet - European Commission CORDIS
    - CORDIS identifies Inspecto Solutions Ltd as coordinator of a closed historical food-contaminant equipment project; current supply or closure is not established. ([cordis.europa.eu](https://cordis.europa.eu/project/id/xx.xx))
20. Bac-Tracker - Project Fact Sheet - European Commission CORDIS
    - CORDIS identifies BactuSense as coordinator of the historical Bac-Tracker project; the record does not establish contemporary equipment supply or company closure. ([cordis.europa.eu](https://cordis.europa.eu/project/id/xx.xx))
21. Institutions - Ipanema Consortium
    - The consortium identifies Diagenetix and BioRanger; this institutional reference does not settle present operations or contemporary purchasing availability. ([ipanema2020.com](https://ipanema2020.com/consortium/))
22. Hygiene ATP Testing Meter - Bioeasy International
    - The Malaysian commercial listing does not resolve the legal relationship between the captured Bioeasy identities. ([bioeasy.my](https://www.bioeasy.my/hygiene-atp-testing-meter/))
23. Equipment and Technical Service - RELES S.R.L.
    - RELES advertises technical support for named Neogen instruments; this does not establish equipment sales for every supported model. ([reles.com.pe](https://www.reles.com.pe/opc))
24. Luminómetro Clean Trace LM1 - Mavar
    - Mavar lists LM1 with legacy 3M branding, leaving the present manufacturer-channel relationship unresolved. ([mavar.com.uy](https://mavar.com.uy/producto/luminometro-3m-clean-trace-instrument-lm1/))

25. About Kormay Biomedicals
    - Kormay identifies a Canadian laboratory-supply business serving food production, but its company page does not establish the named hardware needed for a matched comparison. ([kormay.ca](https://www.kormay.ca/pages/about-kormay-biomedicals))
26. Mycotoxin Readers - Agrobiotek Internacional
    - Agrobiotek maintains a mycotoxin-reader category, but the rendered category does not settle a specific currently offered reader and appointment. ([agrobiotek.com](https://www.agrobiotek.com/productos/lectores-micotoxinas))
27. Sobre Nosotros - ITS Technologies
    - ITS Technologies describes instrumentation and support activities; a named current food-safety equipment relationship remains necessary. ([itstecno.com](https://www.itstecno.com/sobre-nosotros/))
28. Quienes Somos - Rilab
    - Rilab describes represented brands and technical support for analytical and food-related users; the company page does not settle a named matched hardware offer. ([rilab.cl](https://rilab.cl/quienes-somos/))
29. Food Testing Equipment in Kuwait - Burgan Equipment Co.
    - Burgan markets food-testing and hygiene categories in Kuwait; the page does not establish every named configuration and appointment. ([burganequipment.com](https://burganequipment.com/food-testing-kuwait/))
30. Merck Food Safety Testing - Gulf Scientific Corporation
    - Gulf Scientific promotes Merck food-testing packages; the historical offering does not settle current model-specific appointment and fulfillment. ([gulf-scientific.com](https://gulf-scientific.com/news-events/merck-food-safety-testing-solutions-in-the-era-of-covid-xx.xx/))
31. Our Partners - Modern Scientific Supplies
    - Modern Scientific Supplies lists food-related analytical and monitoring partners; the partner list does not settle a complete local equipment bid. ([mss-jo.com](https://www.mss-jo.com/our-partners))
32. Food Safety - elwan LABTECH Supply
    - elwan LABTECH presents ATP and food-microbiology categories, requiring a named hardware and local undertaking for matched comparison. ([labtech.ps](https://www.labtech.ps/products/category/food-safety/))
33. Syria Distributor - Pharma Test
    - Pharma Test identifies VART as its Syrian distributor; this appointment does not itself establish a named qualifying food-safety instrument. ([pharma-test.de](https://www.pharma-test.de/en/contact/distributor-contacts/asia/syria/))
34. Laboratory Devices - ABU NOOR AL-DEEN Medical Corporation
    - ABU NOOR AL-DEEN describes laboratory devices serving food-and-beverage users among other sectors, but not the complete food-specific configuration. ([abunooraldeen.com](https://www.abunooraldeen.com/Division-Units.php?div_id=xx.xx&lang=en))
35. Food & Beverages - Katchey Company Limited
    - Katchey's food-and-beverage page establishes sector participation but does not settle the instrument, appointment, and support package for a particular bid. ([katchey.com](https://katchey.com/services/beverages/))
36. Partners - Precur Chem Technologies Limited
    - Precur Chem identifies Interscience-related microbiology equipment categories in its partner portfolio; local configuration and continuing appointment remain separate. ([precurchem.co.tz](https://precurchem.co.tz/partners/))
37. Company Profile - Medics & Procurement
    - Medics & Procurement describes a Tanzanian laboratory-supply and procurement business; a named food-safety instrument and responsibilities remain to be established. ([medicsprocurementservices.com](https://medicsprocurementservices.com/company-profile))

38. Products - Archiepollo Solutions Limited
· Archiepollo lists analytical, microbiology, and food-testing categories; these do not settle the named qualifying instrument or channel undertaking. ([archiepollosolutions.co.ke](https://archiepollosolutions.co.ke/products/))
39. Products - Chemoquip
· Chemoquip presents laboratory equipment and support categories; the matched food-safety hardware and local agreement remain configuration-specific. ([chemoquip.com](https://www.chemoquip.com/products))
40. About - Future Company for Scientific Services
· Future Company describes new and refurbished instruments plus installation and continuing local support, creating an asset-condition and warranty comparison. ([gc-future.net](https://gc-future.net/about))
41. Laboratory Equipment Suppliers in Egypt - Gemicatech
· Gemicatech describes Egyptian laboratory equipment serving food-and-beverage users; a named executable safety package remains necessary. ([gemicatech.com](https://www.gemicatech.com/posts/lab-equipment-suppliers-in-egypt))
42. A Propos - Tradetec
· Tradetec identifies laboratory distribution with a consumables emphasis; this does not settle a named food-safety hardware offering. ([tradetec.ma](https://tradetec.ma/a-propos/))
43. Instrument de Mesure - SMS Bio
· SMS Bio markets measurement categories including pH and temperature to agro-food laboratories; named application and local obligations remain separate. ([smsbio.tn](https://www.smsbio.tn/instrument-de-mesure-tunisie/))
44. Food Safety - SMART SCIENCE CO., LTD.
· SMART SCIENCE lists food-safety and equipment categories; those categories do not establish every named configuration or appointment. ([smartscience.co.th](https://www.smartscience.co.th/food-safety))
45. Food-Safety Product and Equipment Catalog - S&S Bioproducts
· S&S Bioproducts lists equipment alongside food-safety offerings, but buyer-specific appointment and support commitments require confirmation. ([ssbpc.com](https://www.ssbpc.com/en/))
46. Food Safety and Instrument Catalog - Scientific Supply Co., Ltd.
· Scientific Supply presents food-safety testing and instrument categories including readers and washers; a named executable package remains a separate requirement. ([scientificsupply.co.th](https://www.scientificsupply.co.th/))

18. Company Profiles

18.1. bioMérieux

[redacted] GENE-UP is marketed for food, feed, and environmental applications; the US VIDAS KUBE page provides an ordering route. This gives food manufacturers and testing laboratories a within-supplier platform choice, but does not establish that the systems cover identical applications or that either is deliverable in every country.

For GENE-UP, bioMérieux advertises installation, IT integration, training, maintenance, repairs, and remote support. [redacted] Delivery and service obligations should be confirmed in the local agreement.

Sources & Evidence

1. GENE-UP - bioMérieux
   - bioMérieux markets GENE-UP as a real-time PCR platform for food, feed, and environmental applications.
   - The offering advertises installation, IT integration, training, maintenance, repairs, and remote support.
2. VIDAS KUBE - bioMérieux
   - The US commercial page presents VIDAS KUBE as an automated food-pathogen detection instrument using immunoassay technology and provides an ordering route.
   - This establishes a distinct marketed platform, not identical application coverage or worldwide delivery.
   - Company verification: Commercially offers VIDAS KUBE as an automated food-pathogen detection instrument, with ordering and sales-contact options.
3. bioMérieux Annual Report 2024
   - Company verification: The 2024 annual report identifies GENE-UP food-industry offerings and reports use of specified tests by USDA FSIS laboratories.
4. News - Certification Announcements | MicroVal
   - Company verification: Records certification of a bioMérieux GENE-UP food-pathogen detection application.

18.2. Neogen Corporation

[redacted] This is a dated customer-selection event, not merely a product launch. It does not establish universal regulatory authorization, acceptance by another customer, or continuing purchasing commitments.

Neogen also markets the Molecular Detection System to commercial food-testing laboratories through its contract-laboratory offering. [illegible] Application acceptance and the buyer's own delivery and support agreement remain separate purchasing conditions.

Sources & Evidence

1. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
   - Neogen's June xx.xx 2024 announcement reports a USDA FSIS contract and MDS selection for specified Salmonella and Listeria applications involving meat, poultry, and egg products.
   - It identifies MDS as an isothermal amplification platform but does not establish the contract's continuing term or subsequent purchasing commitments.
   - Company verification: A June xx.xx 2024 announcement reports a USDA FSIS contract for the Neogen Molecular Detection System and associated food-pathogen testing products.
2. Food Safety Contract Lab Solutions - Neogen
   - Neogen's commercial contract-laboratory offering includes the Molecular Detection System under pathogen testing.
   - The page supports marketed participation but does not establish continuation of the USDA FSIS contract.
3. Neogen Outlines Strategy for Growth, Innovation and Margin Expansion at 2026 Investor Day
   - Company verification: The October xx.xx 2026 announcement confirms continuing Neogen Corporation operations and a dedicated Global Food Safety business.
   - Company verification: Describes an international food-industry customer base and offerings spanning pathogen detection, allergens, and sanitation monitoring; these are not equipment-only revenue disclosures.
4. FGIS Performance Verified Mycotoxin Test Kits - Tables Updated October 15, 2026
   - Company verification: Lists Neogen Veratox Aflatoxin with Stat Fax Reader Model xx.xx.

18.3. Hygiena

Hygiena's EnSURE Touch addresses portable ATP-based cleaning verification in food processing, a distinct purchasing role from pathogen identification. [illegible] Its proposition therefore combines local hygiene hardware with a shared records environment; the commercial materials do not independently establish improved food-safety outcomes.

Food manufacturers evaluating a multi-site deployment should specify reporting access, record retention, connectivity permissions, and the responsible support provider before standardizing. These are procurement conditions to verify, not guaranteed features of every purchase. [illegible]

Sources & Evidence

1. EnSURE Touch ATP Luminometer for Hygiene Monitoring
   - Hygiena markets EnSURE Touch as a handheld ATP cleaning-verification instrument for applications including food processing.
   - The page describes SureTrend synchronization, remote training and troubleshooting, and optional advanced data analysis.
   - Company verification: Offers the EnSURE Touch handheld ATP hygiene-monitoring instrument for food-processing cleaning verification.
2. Identifying Sources and Root Causes of Food Hazards - Part 1
   - Hygiena distinguishes cleaning verification from raw-material and finished-product testing.
   - It describes SureTrend storing and trending EnSURE Touch results across facilities, supporting the connected-records proposition rather than independent outcome claims.
3. About Us | Hygiena
   - Company verification: Hygiena's corporate history records its acquisition by EW Group in 2021.
   - Company verification: The company describes an international operating and distributor network supporting its food-safety instrument business.
   - Company verification: Its corporate history identifies the 2018 acquisition of Charles River's Celsis Dairy, Food & Beverage division. ([hygiena.com](https://www.hygiena.com/about-us))
4. DKSH and Hygiena® Expand Partnership to Deliver Food Safety and Health Diagnostics Solutions in Malaysia
   - Company verification: The announcement identifies DKSH as a Malaysian commercial channel for Hygiena products. ([dksh.com](https://www.dksh.com/my-en/home/media/news/dksh-and-hygiena-expand-partnership-to-deliver-food-safety-and-health-diagnostics-solutions-in-malaysia))

18.4. Agilent Technologies, Inc.

Agilent Technologies, Inc. provides named chemical-contaminant analysis options rather than a food-only instrument portfolio. Its xx.xx LC/Q-TOF is marketed for food-safety screening, with associated libraries addressing pesticides, veterinary drugs, and mycotoxins. ■■■ ■■■■ ■■■■■■■■ ■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■■■■ ■■■■ ■■■■■■■ ■■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■ ■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■■ ■■■■■■ ■■■ ■■■ ■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■■■■■■■■■

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Sources & Evidence

1. Multi-Vendor Services - Agilent
   - Agilent offers repair, maintenance, and compliance support for non-Agilent chromatography and mass spectrometry instruments.
   - Its service advisor distinguishes plans by instrument and region, supporting conditional rather than universal coverage.
2. 6546 LC/Q-TOF - Agilent
   - Agilent markets the xx.xx LC/Q-TOF for food-safety screening and identifies associated libraries for pesticides, veterinary drugs, and mycotoxins.
   - The product page provides a quotation route, not a location-specific delivery commitment.
3. 7250 GC/Q-TOF - Agilent
   - Agilent markets the xx.xx GC/Q-TOF for applications including pesticide screening and compound identification.
   - Its commercial page provides a quotation route and identifies food-testing application coverage.
4. Food Safety and Authenticity Testing - Agilent High-Resolution Mass Spectrometry Workflows
   - Company verification: Identifies the Agilent xx.xx LC/Q-TOF and xx.xx GC/Q-TOF instruments as offerings for food-contaminant screening and identification.

18.5. Bruker Corporation

Bruker Corporation's relevant food-safety proposition is MALDI Biotyper for microbial identification and confirmation, rather than a general replacement for every detection or hygiene-verification platform. ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪ ▪ ▪▪▪ ▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ This provides bounded third-party support beyond the company's promotional performance claims.

Food-industry and independent laboratories should first establish whether their equipment gap concerns identification or confirmation, then match the offered system and certificate scope to the accepted deliverable. ▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪ ▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪ ▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪ ▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪ ▪▪▪▪▪▪▪▪▪▪▪ Certificate renewal or scope changes should prompt reassessment before procurement or substitution.

Sources & Evidence

1. MALDI Biotyper for Food Microbiology - Bruker
   - Bruker commercially presents MALDI Biotyper for food-microbiology identification and confirmation.
   - The page describes application-specific certification claims, not universal substitution for other food-testing equipment.
   - Company verification: Offers the MALDI Biotyper instrument for food-microbiology identification and confirmation applications.

2. MicroVal Certificate of Compliance 2017LR75 - MALDI Biotyper Listeria Confirmation
   - MicroVal certificate 2017LR75 records renewal on January xx.xx 2026 for specified MALDI Biotyper systems used for confirmation of Listeria spp. and Listeria monocytogenes.
   - The certificate names Bruker Daltonics GmbH & Co. KG as manufacturer and supplier and identifies LRQA Nederland B.V. as issuer.
3. News - Certification Announcements | MicroVal
   - Company verification: Records certification activity for Bruker MALDI Biotyper food-microbiology applications.

18.6. R-Biopharm AG

[redacted] The offering combines hardware with a specified software and test family; it does not establish interchangeability with other lateral-flow products. Software compatibility and continuing support therefore belong in the purchasing specification rather than being inferred from the reader alone.

The USDA Federal Grain Inspection Service performance-verified list names RIDA QUICK Aflatoxin RQS with RIDA SMART BOX and RIDA SMART APP for corn. [redacted] The trade-off is a bounded accepted application relationship rather than unrestricted reader choice; extending into the marketed allergen menu requires a separate acceptance check.

Sources & Evidence

1. RIDA SMART BOX - R-Biopharm Food & Feed Analysis
   - R-Biopharm markets RIDA SMART BOX with RIDA SMART APP for quantitative RIDAQUICK allergen and mycotoxin lateral-flow applications.
   - The commercial description establishes a reader, software, and associated test-family relationship, not compatibility with every lateral-flow product.
2. FGIS Performance Verified Aflatoxin Test Kits
   - The FGIS performance-verified list associates R-Biopharm RIDA QUICK Aflatoxin RQS with RIDA SMART BOX and RIDA SMART APP for corn.
   - The same list contains other reader-associated systems, supporting a bounded, nonexclusive acceptance comparison rather than blanket reader approval.
   - Company verification: Lists R-Biopharm testing with RIDA SMART BOX.
3. About us - R-Biopharm AG
   - Company verification: Identifies R-Biopharm AG as a family-run business with food and feed analysis operations.
   - Company verification: Describes international subsidiaries and distributors, supporting the company's commercial reporting identity.
4. RIDA SMART BOX - Food & Feed Analysis | R-Biopharm
   - Company verification: Offers the RIDA SMART BOX imaging instrument for quantitative allergen and mycotoxin lateral-flow testing in food and feed laboratories.

18.7. FOSS

FOSS markets BacSomatic for bacterial and somatic-cell counting in raw milk, giving equipment buyers a dairy-specific flow-cytometry proposition. ■■■ ■■■■■■■■■■ ■■■■■ ■■ ■■■■■■■■■■■■■■■■■■ ■■■■■■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■■ ■■■■■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■ ■■■■■■■■■ ■ ■■■■■■ ■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■ ■■ ■■■■■■■■ ■■■■■■■■ ■■■■ ■■■■■■■■ That is supplier-published use evidence, not independent proof of performance across dairy plants.

For a dairy processor, the buying question is whether this raw-milk measurement role fits its accepted intake decisions. ■■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■ ■■■■■■■ ■■■ ■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■ ■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■■■ ■■■■■■■■■■■■■■■■ ■■■■■■ ■■■■ ■■■■■■ ■■■■ ■■■■■■■ ■■■■■■■ ■■■■■ ■■■■■■■ ■■■■■■■■■■ ■ ■■■■■■■■■ ■■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■ ■■■■■■■■■ ■■■■■■■■ ■■■■ ■ ■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■ ■■■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ A new receiving-site requirement or service renewal should trigger a package review, not an assumption that every dairy operation needs another instrument.

Sources & Evidence

1. BacSomatic - FOSS
   - FOSS markets BacSomatic for raw-milk bacterial and somatic-cell counting and positions it within flow-cytometry-based hygienic-quality assessment.
   - The page publishes a Müller Milk and Ingredients customer account about incoming milk quality; this is supplier-published use evidence.
   - Company verification: Offers BacSomatic for bacterial and somatic-cell counting associated with raw-milk hygienic quality.
2. Service Agreements - FOSS
   - FOSS markets FossCare service agreements offering on-site and remote preventive maintenance with configurable support plans.
   - This general offering does not independently establish a particular BacSomatic customer's local coverage or contractual obligations.
3. News - Certification Announcements | MicroVal
   - Company verification: Records certification activity for FOSS BactoScan raw-milk testing instruments.

18.8. Sartorius

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Sartorius separately markets maintenance services and contracts for MD8 air samplers and states that service intervals are defined by contract. ■■■■ ■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■ ■■■ ■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■■■■ ■■■■■■

[redacted] A laboratory whose immediate gap is sampling or filtration can compare supporting hardware without assuming analyzer replacement, while retaining responsibility for downstream analysis and acceptance of the resulting evidence.

Sources & Evidence

1. Advanced Microbiological Testing Solutions for Contamination Control and Product Quality - Sartorius
   - Sartorius explicitly addresses food, beverage, and water microbiology laboratories.
   - Its portfolio lists MD8 air samplers and Microsart pumps and manifolds alongside associated supplies, establishing distinct supporting-equipment roles.
   - Company verification: Offers microbiological instruments for food and beverage laboratories, including Microsart pumps and manifolds and MD8 air samplers.
2. Filtration Equipment for Microbiological Testing - Sartorius
   - Sartorius provides named microbiological filtration equipment, including Microsart Combi.jet, manifolds, and pumps.
   - The page provides a quotation and information-request route for the commercial equipment offering.
3. Services for Microbiological Testing Instruments - Sartorius
   - Sartorius markets microbiological instrument services and maintenance contracts that explicitly include MD8 air samplers.
   - Its service information states that maintenance intervals are defined by contract; regulated-industry positioning does not establish universal food-industry obligations.

18.9. METTLER TOLEDO

[redacted] Its filing describes integration with material-handling and packaging systems and ProdX connections to manufacturing and enterprise systems. Equipment integration and inspection-record continuity therefore belong in the purchasing decision; the presence of associated weighing or quality functions does not make those functions interchangeable with contamination inspection.

[redacted] Separate equipment purchases remain an alternative where existing systems are suitable, but leave coordination responsibilities with the buyer or integrator. Destination-specific support and the allocation of obligations among seller, integrator, and customer must be established in the offer.

Sources & Evidence

1. Mettler-Toledo International Inc. - 2025 Form 10-K
   · The filing describes food-related metal detection and X-ray inspection, integration with material-handling and packaging systems, and ProdX integration with manufacturing and enterprise systems. These support an integration-focused purchasing assessment, not automatic allocation of contractual responsibility. ([sec.gov](https://www.sec.gov/Archives/edgar/data/xx.xx/xx.xx/mtd-xx.xx.htm))
2. Mix and Match Your Ideal Combination Inspection System
   · METTLER TOLEDO markets standalone and combination inspection systems, including CM and CX configurations, together with global service, training, and ProdX connectivity support. The page supports comparison of combined and separate purchases, not a destination-specific fulfillment guarantee. ([mt.com](https://www.mt.com/us/en/home/library/product-brochures/product-inspection/PI/Combinations_Brochure.html))
3. Product Inspection Systems | METTLER TOLEDO
   · Company verification: Offers food-industry metal-detection and X-ray equipment for physical-contamination inspection.

18.10. Interscience

Interscience supports selective laboratory investment rather than an assumed complete analyzer replacement. ■■■ ■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■ ■■■■■■■■ ■■■ ■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■ ■■■■■■■■■■ A laboratory can therefore compare replacement of a particular supporting function with purchasing combined equipment, without assuming that renewing a reader requires replacing all preparation assets.

The commercial choice depends on the equipment that the laboratory intends to retain and the responsibilities it wants to consolidate. Combined incubation and reading can bring those functions into one equipment relationship, while separate purchases preserve independent renewal choices. ■■■■■■■ ■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■■■■ ■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■ ■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■ ■ ■■■■■■■■ ■■■■■■■■■■■■■

Support also has a purchasing gate. ■■■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■■■■■■■ ■■■■ ■■■■■■■ ■■■■■■■■ ■■■ ■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■■■ ■■■ ■■■■■■■■ ■■ ■■■ ■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■ ■■■■■■■■■ ■■■■ ■■ ■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■■■■■ Buyers should settle the applicable plan and local support coverage with the initial order rather than assume that identical protection can be added later.

Sources & Evidence

1. Products and Accessories - Microbiology
   · Interscience lists food among its sectors and separately markets blenders, gravimetric dilutors, dispensing pumps, platers, and colony counters. This establishes distinct purchasable equipment functions, without establishing compatibility with a buyer's retained equipment. ([interscience.com](https://www.interscience.com/en/products/))
2. Real-Time Incubator and Colony Counter - Interscience
   · The ScanStation catalog identifies combined real-time incubation and colony-counting equipment. It provides a documented combined-function alternative to separately listed supporting equipment. ([interscience.com](https://www.interscience.com/en/products/real-time-incubator-and-colony-counter/?lang=en))

3. Service Offers - Interscience
   - Interscience publishes warranty-extension and service options subject to conditions and area-dependent availability. Warranty extension is available only at equipment purchase and requires warranty registration. ([interscience.com](https://www.interscience.com/en/support/services/service-offers?lang=en))
4. BagMixer 400 P - Lab Blender | Interscience
   - Company verification: Offers the BagMixer xx.xx P laboratory blender for food-industry microbiological analysis.

18.11. Clear Labs

[illegible] Laboratories should establish whether characterization serves a defined traceback or facility-monitoring decision; buyers needing only an accepted detection result should not assume that additional capabilities justify replacement. Comparative performance statements remain supplier claims.

Clear Labs lists separate client-services and technical-support channels, including training and troubleshooting. These provide a route for commercial qualification, not a Clear Safety-specific delivery or service undertaking. [illegible]

Sources & Evidence

1. Clear Safety - Clear Labs
   - Clear Labs markets Clear Safety for Listeria and Salmonella sequencing, characterization, and environmental mapping. Its comparative performance statements are supplier claims; the page does not establish an executable destination-specific supply agreement. ([clearlabs.com](https://clearlabs.com/clear-safety/))
   - Company verification: Clear Labs markets Clear Safety as an automated food-pathogen testing platform.
   - Company verification: The portfolio addresses Listeria and Salmonella characterization for food-safety programs.
2. Contact Us - Clear Labs
   - Clear Labs provides client-services channels for products and orders and technical-support channels covering instrumentation, training, and troubleshooting. These are inquiry routes, not Clear Safety-specific contractual coverage. ([clearlabs.com](https://www.clearlabs.com/contact-us))
3. About Clear Labs - Clear Labs
   - Company verification: Clear Labs describes food safety as a commercial application of its automated genomic platforms.
   - Company verification: Its company history documents the Clear Safety launch and a US operating presence.

18.12. Hanna Instruments

Hanna Instruments provides a food-specific portable pH proposition rather than an interchangeable substitute for every preventive-condition instrument. [illegible]

■■■■■■ The catalog addresses food safety alongside composition, texture, and other quality objectives, so purchasing relevance must follow the intended pH requirement rather than the supplier's entire food portfolio.

The HI98161 offering includes a Foodcare electrode, stored measurement records, associated traceability information, and USB transfer to a computer. These features make the record-transfer arrangement and continuing electrode supply relevant commercial considerations for a food manufacturer purchasing portable measurement equipment. ■■■■ ■■■■■■■■■ ■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■ ■■ ■■■■■■■■ ■■■■■■■■■■ ■■ ■■■■■■■■ ■■■■■■ ■■■■■■■■■

Buyers should specify whether the required deliverable is pH evidence for a defined food-safety control or a quality measurement, then obtain a product-specific offer covering the meter, electrode, record access, and local support. ■ ■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■ ■■■■■■■■ ■■■■ ■ ■■■■■■■ ■■■■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■■ ■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■■■■

Sources & Evidence

1. Food Testing Equipment - Hanna Instruments
   · Hanna's US food catalog lists HI99161 and HI98161 portable pH instruments and discusses food safety alongside quality and composition applications. This supports application-specific attribution rather than treating its complete food portfolio as safety equipment. ([hannainst.com](https://hannainst.com/food/?filter=food-other))
   · Company verification: Hanna Instruments markets equipment explicitly addressing food safety and product integrity.
   · Company verification: Its food-testing catalog lists the HI99161 food and dairy pH meter and HI98161 Professional Foodcare Portable pH Meter.
2. Professional Foodcare Portable pH Meter - HI98161
   · HI98161 is marketed as a portable Foodcare pH meter with a food-specific electrode, stored records and associated traceability data, and USB computer connectivity. These establish product features, not centralized records management or worldwide service commitments. ([hannainst.com](https://hannainst.com/hi98161-portable-foodcare-ph-meter.html))
3. Foodcare Meters and Testers - Hanna Instruments Romania
   · Company verification: The Romanian commercial catalog markets Foodcare pH instruments for food-safety and HACCP-related applications.
   · Company verification: Identifies HANNA INSTRUMENTS SERVICE S.R.L. as the local commercial entity.
4. ISO 9001:2015 Certificate - HANNA INSTRUMENTS S.R.L.
   · Company verification: The certificate identifies HANNA INSTRUMENTS S.R.L. in Nușfalău, Romania, with analytical-device manufacturing and related activities.
   · Company verification: The stated certificate validity runs from November xx.xx 2023, through October xx.xx 2026.

18.13. LCTech GmbH

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assessing downstream instrument replacement separately. Retaining an existing analyzer remains conditional on documented application fit and any required equipment connections; a modular catalog does not establish universal compatibility.

LCTech advertises installation, training, spare parts, maintenance, and repair support, and directs customers to an existing in-country distributor first. Buyers should establish whether the distributor or LCTech owns each handover and continuing-support obligation. ■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■ ■ ■■■■■■■ ■■■■■■■■ ■■■ ■■■ ■■■■■■■■■ ■■■■■■■■ ■■■■ ■■■ ■■■■■■■ ■■■■■■ ■■■ ■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■ ■■ ■■■■■■■■■■■■■■ ■■■ ■■■ ■■■■ ■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■■

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Brand-specific offerings and contractual relationships still require separate assessment; shared ownership does not establish interchangeable products or a unified customer contract.

Sources & Evidence

1. The FREESTYLE Robotic System - LCTech
   - LCTech markets FREESTYLE robotic preparation equipment for food and feed, including mycotoxin, pesticide, and MOSH/MOAH application configurations. This supports a preparation-automation role, not universal downstream instrument compatibility. ([lctech.de](https://www.lctech.de/en/products/robotic-systems))
   - Company verification: Markets FREESTYLE robotic equipment for food/feed laboratory sample preparation.
   - Company verification: Identifies commercial configurations addressing mycotoxins, pesticides, and MOSH/MOAH.
2. Service at LCTech
   - LCTech advertises installation, training, spare parts, maintenance, and repair assistance and instructs customers to contact an existing in-country distributor first. Particular distributor obligations remain contract-specific. ([lctech.de](https://www.lctech.de/en/support/service))
3. Velaris and GERSTEL FAQs: Stronger Together, What It Means for You
   - GERSTEL describes Velaris as a group operating under shared ownership and lists both GERSTEL and LCTech among its brands. This supports an ownership-diversification caution without establishing interchangeable products or unified contracts. ([gerstelus.com](https://www.gerstelus.com/blogs/velaris-and-gerstel-faqs-stronger-together-what-it-means-for-you/))
   - Company verification: Identifies LCTech among brands operating under shared Velaris ownership.
   - Company verification: Supports a common-parent reporting relationship with GERSTEL, not an assumption that the two are independent consolidated competitors.
4. Press Release LCTech GmbH
   - Company verification: The September xx.xx 2023 company announcement identifies LCTech within a laboratory-automation platform following acquisitions backed by Battery Ventures.
   - Company verification: Provides dated ownership-platform history rather than evidence of an independent LCTech parent group.

18.14. BIOLAN

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The distinction from a broad laboratory platform is the dedicated purchasing purpose: a buyer can assess equipment for an identified fish-histamine requirement without assuming that it replaces other contaminant-testing capabilities.

Application coverage is a material qualification condition. BIOLAN's BIOFISH xx.xx HIS description explicitly excludes fish sauce from its stated AOAC certification coverage, despite listing fish sauce as a measurement application. ■■■■■ ■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■ ■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■ ■■■■■■■■ ■■■■■ ■■■■■■ ■■■■■■■■ ■■ ■■■ ■■■■■■■■■ ■■■ ■■■■ ■■■■■■■■■■■■■ ■ ■■■■■■ ■■■■■■■■■■■ ■■■ ■ ■■■■■■■■■■■■■ ■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■

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Sources & Evidence

1. Histamine - BIOLAN
   - BIOLAN's histamine catalog presents BIOFISH xx.xx HIS and portable BIOFISH xx.xx HIS for fish-histamine measurement, establishing a dedicated target-and-matrix equipment proposition. ([biolanmb.com](https://biolanmb.com/en/category/products/histamine/))
   - Company verification: Lists BIOFISH xx.xx HIS and BIOFISH xx.xx HIS instruments for histamine measurement in fish.
   - Company verification: Provides a Zamudio, Bizkaia commercial contact address.
2. BIOFISH 3000 HIS - BIOLAN
   - BIOLAN describes BIOFISH xx.xx HIS as a connected enzymatic biosensor for histamine in fish. Its product description lists fish sauce as an application but explicitly excludes it from the stated AOAC certification coverage. ([biolanmb.com](https://biolanmb.com/en/biofish-xx.xx-his/))
3. Sales Network - BIOLAN
   - BIOLAN publishes sales hubs and regional offices across EMEA, APAC, Latin America, and North America. The network establishes inquiry routes, not identical model-specific delivery or service obligations in all destinations. ([biolanmb.com](https://biolanmb.com/en/sales-network/))

18.15. Testo

Testo presents two distinct purchasing relationships: individual food-measurement instruments and an integrated monitoring-and-records offering. ■■■ ■■ ■■■■■■■ ■■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■■■■■ This makes the allocation of responsibility between site users and central food-safety teams part of the acquisition, rather than treating every sensor or handheld meter as an isolated purchase.

A digital bundle is not the only documented route. Testo's food-thermometer catalog separately markets instruments such as the testo xx.xx-IR to professional kitchens, restaurants, and supermarkets. ■ ■■■■■ ■■■■■ ■■■■■■■■ ■■■■ ■■■■■■■ ■■■■ ■■■ ■■■■■■■■■■■■ ■■■ ■■■■■■■ ■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■■■■ ■■■■ ■■■■■■■■■■■■■■■■■ ■■■■■■■■

[redacted] The UK offering describes monitoring and documentation capabilities; it does not independently establish accepted audit evidence or an identical service undertaking in other countries.

Sources & Evidence

1. Digital Food Safety Management with testo Saveris Food
   - Testo's UK Saveris Food offering combines stationary monitoring, handheld instruments, software, and services and identifies restaurants, catering, and distribution centers as application settings. It describes monitoring, records, and escalation functionality, not independent customer acceptance. ([testo.com](https://www.testo.com/en-UK/solutions/food-safety-management))
2. Food Thermometers - Testo
   - Testo separately markets food thermometers, including testo xx.xx-IR, for professional kitchens, restaurants, and supermarkets. This supplies a documented standalone purchasing alternative to a broader digital-management bundle. ([testo.com](https://www.testo.com/en-UK/products/food-thermometers))
   - Company verification: The official UK store markets food-safety thermometers to professional kitchens, restaurants, and supermarkets.
   - Company verification: Specifically presents the testo xx.xx-IR food thermometer.
3. Food safety instruments | Testo Middle East Dubai
   - Company verification: The UAE commercial catalog lists food thermometers, frying-oil testers, and pH meters under Food Safety and provides a Dubai showroom contact.

18.16. Novasina

[redacted] Neutec's commercial listing identifies Novasina as the manufacturer and positions the instrument for food-production and quality laboratories, with user management and computer or printer interfaces. Buyers should specify the safety-related water-activity requirement rather than attribute every quality-laboratory application to food safety.

The delivery relationship deserves separate attention. Neutec advertises calibration, equipment qualification, and preventive-maintenance services for its Novasina offering, while Novasina directs prospective buyers through a country- and device-specific partner inquiry. [redacted]

Sources & Evidence

1. LabMaster Neo - Water Activity Meter - Neutec
   · Neutec markets LabMaster Neo as Novasina water-activity equipment for food-production and quality laboratories, describes user management and data interfaces, and advertises calibration, equipment qualification, and preventive maintenance. These are Neutec's offering claims, not universal manufacturer service commitments. ([neutecgroup.com](https://www.neutecgroup.com/p/water-activity-labmaster-neo-detail/))
2. Distributors Around the Globe - Novasina
   · Novasina provides a partner-inquiry route asking for country, topic, and device. This establishes manufacturer-facilitated channel inquiry, not a named partner's appointment or enforceable destination-specific support coverage. ([novasina.ch](https://novasina.ch/distributors-around-the-globe/))
3. Water Activity - Novasina Sensors
   · Company verification: Advertises LabMaster-aw neo and other water-activity instruments with food and microbial-safety positioning. ([novasina.ch](https://novasina.ch/water-activity/))

18.17. DKSH

DKSH's documented contribution is distribution and customer support for Hygiena-branded equipment, not a separate manufacturing capability for those systems. The partners' January xx.xx 2025 Malaysian announcement assigned DKSH Business Unit Technology marketing, sales, distribution, and after-sales responsibilities for a portfolio including ATP cleaning-verification systems. ■■■■■■ ■■■■■■■■■ ■■■■■■■ ■■■■■ ■■■ ■■■■■■■ ■■■■■■ ■■■■■ ■■■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■ ■ ■■■■■ ■■■■■■■■■■■■■■■■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■■■■ ■■ ■■■■■■■■■■ ■■■■■ ■■■■■ ■■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■

The commercial contribution extends beyond shipment. ■■ ■ ■■■■■■■■ ■■■■■ ■■■■■■■■ ■■■■■ ■■■■■■■ ■■■■ ■■■■■■■■ ■■■ ■■■■■■■ ■■■■■■■■ ■■■■■■ ■■■■■ ■■■■■ ■■■ ■■■■■■■■ ■■■■■■■■■■■■■■■■■ ■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■ ■■■■■■■■ ■■■■ ■■■■■■■■■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■ ■■■■■■■■■■■■ ■■■■ ■■ ■ ■■■■■■■■■■■■■■■■■ ■■■■■■■ ■■ ■■■■■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■ ■■■■■ ■■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■ ■■ ■■■■■■■■■ ■■■■■■■■■ DKSH's Malaysian service portfolio separately advertises maintenance, repair, spare parts, and warranty coverage, but those general services should not be assumed to cover every Hygiena instrument.

Territorial scope constrains regional purchasing. DKSH's August xx.xx 2025 account describes exclusive Hygiena partnerships in Malaysia, the Philippines, Laos, Myanmar, and Cambodia, with Indonesian food-and-beverage coverage limited to Sumatra. ■■■ ■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■ ■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■■ ■ ■■■■■■■■■■■■■ ■■■■ ■■■■■ ■■■■■■ ■■■■■■■ ■■■■■■■■■■■■■■■■■■■■ ■■■■■■■■■■■ ■■■ ■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■ ■■■■ ■■■■■■■ ■■■ ■■■■■■■■■ ■■■■■ ■■■■■■ ■■■■■■■■■ ■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■ ■■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■ ■■ ■■■■■■■■■■ ■■■■■■■■■■■■

Malaysia's LabShop terms identify DKSH Technology Sdn Bhd as operator and allocate fulfillment, delivery, and customer support to DKSH, while stating that business-to-business transactions require separate arrangements. ■■■■ ■■■■■■■■■■ ■■ ■■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■ ■■■ ■■■■■■■ ■■ ■■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■ ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■ ■■■■■ ■■■■■■ ■■■■■■■■ ■■■ ■■■■■ ■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■■■■■■■

RESEARCH SAMPLE REPORT

[redacted] If appointment continuity or required support cannot be confirmed, the channel's purchasing advantage is unproven.

Sources & Evidence

1. DKSH and Hygiena® Expand Partnership to Deliver Food Safety and Health Diagnostics Solutions in Malaysia
   - The January xx.xx 2025 announcement describes an exclusive Malaysian Hygiena partnership covering ATP cleaning-verification systems and assigns DKSH marketing, sales, distribution, and after-sales functions. ([dksh.com](https://www.dksh.com/my-en/home/media/news/dksh-and-hygiena-expand-partnership-to-deliver-food-safety-and-health-diagnostics-solutions-in-malaysia))
   - Company verification: Announced a Malaysian Hygiena distribution partnership on January xx.xx 2025, including ATP cleaning-verification systems. ([dksh.com](https://www.dksh.com/my-en/home/media/news/dksh-and-hygiena-expand-partnership-to-deliver-food-safety-and-health-diagnostics-solutions-in-malaysia))
2. DKSH and Hygiena® Expand Partnership to Deliver Food Safety and Health Diagnostics Solutions in Malaysia
   - Hygiena's January xx.xx 2025 release confirms the Malaysian partnership and DKSH's commercial and after-sales responsibilities. It describes Hygiena as developing, producing, and providing its diagnostic offerings. ([hygiena.com](https://www.hygiena.com/documents/xx.xx/dksh-and-hygiena-expand-partnership-in-malaysia.pdf))
3. Hygiena EnSURE Touch Instrument ETOUCH | DKSH Malaysia LabShop
   - Malaysia's LabShop lists Hygiena EnSURE Touch as a cleaning-verification and monitoring instrument for food-processing environments, establishing a named advertised offering rather than a completed delivery. ([labshop.dksh.com.my](https://labshop.dksh.com.my/shop/p/hygiena-ensure-touch-instrument-etouch-tecpim000531181))
4. Brewing Efficiency: Heineken Lao Brewery's Success with Hygiena EnSURE Touch
   - DKSH's November xx.xx 2025 account reports Heineken Lao Brewery's selection of EnSURE Touch after its previous hygiene-monitoring method was discontinued, with DKSH providing user familiarization and SureTrend Cloud onboarding. This is supplier-reported customer evidence. ([lab-solutions.dksh.com](https://lab-solutions.dksh.com/insights/brewing-efficiency-heineken-lao-brewerys-success-with-hygiena-ensure-touch/))
5. Our Services | DKSH Technology Malaysia
   - DKSH Technology Malaysia advertises preventive maintenance, repair, spare-parts supply, and warranty coverage. This general service portfolio does not specify an undertaking for every Hygiena instrument. ([dksh.com](https://www.dksh.com/my-en/home/technology/services))
6. Driving Market Expansion for Hygiena's Diagnostic Solutions in Southeast Asia
   - The August xx.xx 2025 account names Malaysia, the Philippines, Laos, Myanmar, Cambodia, and Sumatra food-and-beverage coverage; Indonesia-wide coverage concerns hospitals. These are DKSH-reported exclusive appointments. ([lab-solutions.dksh.com](https://lab-solutions.dksh.com/insights/driving-market-expansion-for-hygienas-diagnostic-solutions-in-southeast-asia/))
   - Company verification: Its August xx.xx 2025 account identifies Hygiena channel territories including the Philippines, Cambodia, Laos, Myanmar, Malaysia, and Indonesia's Sumatra food-and-beverage sector. ([lab-solutions.dksh.com](https://lab-solutions.dksh.com/insights/driving-market-expansion-for-hygienas-diagnostic-solutions-in-southeast-asia/))
7. Terms and Conditions | DKSH Malaysia LabShop
   - LabShop terms identify DKSH Technology Sdn Bhd as operator and assign fulfillment, delivery, and customer support to DKSH. Business-to-business transactions require separate arrangements, and product references do not establish availability in every location. ([labshop.dksh.com.my](https://labshop.dksh.com.my/shop/terms-and-conditions))

19. Companies Covered

Table 506. Global Food Safety Testing Equipment Market, Companies Covered

Company
A&D
ABU NOOR AL-DEEN Medical Corporation
Addium Inc.
Advanced Scales & Equipment Ltd.
AFRIMET MAROC
Agilent Technologies, Inc.
Agrobiotek Internacional
AKSO Produtos Eletrônicos Ltda.
Al-Imtiaz Scientific Company
Alliance Bio Expertise
Analytik Jena
Anatolia Geneworks
Anaum Measuring Equipment LLC
Ancera
Anritsu
Anton Paar
Aqualytic (Pty) Ltd
Archiepollo Solutions Limited
Arrow Scientific
Ascend
Atabey Teknik
ATAGO CO., LTD.
Aurora Biomed Inc.
Axel Semrau
Azma Tejarat Arad
BactuSense Technologies
Beckman Egypt
Beijing Kwinbon Technology Co., Ltd.
Bentley Instruments
Bio-Rad Laboratories, Inc.

Table 506 - continued

Company
Bioavlee S.A.
BioCheck SPA
Biodinamix
Bioeasy International Sdn Bhd
Bioer Technology
BIOLAN
Biolegend Scientific Ltd
Biolog, Inc.
bioMérieux
BioSystems
Bruker Corporation
Burgan Equipment Co.
Byonoy
Camtech Diagnostics
CEM Corporation
Charm Sciences, Inc.
Chemoquip
CHR Hansen
Chromatec
Clear Labs
Clinilab
ColiMinder
Copan
DeltaTrak, Inc.
Detectores Brasil
Diagenetix, Inc.
Diamidex
Dissel Mexicana
DKSH
Don Whitley Scientific
dsm-firmenich
ECC Algérie

Table 506 - continued

Company
Elico
elwan LABTECH Supply
Enbiotech
EnviroLogix, Inc.
Ethik
Everest Instruments Pvt. Ltd.
FoodChek Systems Inc.
Fortress Technology Inc.
FOSS
Future Company for Scientific Services
Gemicatech
GeneReach Biotechnology Corp.
Genesystem
GERSTEL
GIS
Gold Standard Diagnostics
Gulf Scientific Corporation
Hach
Hamilton Company
Hangzhou Allsheng Instrument Co., Ltd.
Hanna Instruments
HiMedia Laboratories
Hitachi High-Tech Analytical Science
HORIBA
HTS Centroamérica
Hygiena
IDEXX Laboratories, Inc.
INGOS s.r.o.
Inspecto Solutions Ltd
Interscience
Ishida Co., Ltd.
ITS Technologies

Table 506 - continued

Company
IUL, SA
JASCO Corporation
JEOL Ltd.
Jiangsu Skyray Instrument Co., Ltd.
Katchey Company Limited
Kikkoman Biochemifa Company
KNAUER
KogeneBiotech
Kormay Biomedicals
Labearer Court Limited
Labex Pty Ltd
Labindia Instruments
LabMart Limited
Labo City Agdal
Labotec
LabX Supplies FZCO
LASEC
LCTech GmbH
LECO Corporation
Loma Systems
Lumex Instruments
Luminultra
Marconi Equipamentos Para Laboratórios Ltda
Mavar
MBS SRL
Medics & Procurement
Mekitec Oy
Merck KGaA
Metrohm
METTLER TOLEDO
MicroQuality
Microsep

Table 506 - continued

Company
Milestone
Milkotronic Ltd.
Minebea Intec
Miuras
Modern Scientific Supplies
Molecular Devices
Moris Entreprises
National Separations
NEMIS Technologies AG
Neogen Corporation
Nesvax Innovations
Novasina
OPTEX Co., Ltd.
OptiGene
Pathotrak
PEF Analysis
Perfect Vision Trading & Services LLC
PerkinElmer
Precur Chem Technologies Limited
Premier Diagnostics
ProGnosis Biotech
Promega Corporation
Promicol
QIAGEN
Quimiem
R-Biopharm AG
RawTech Scientific Company
REDA Lab
Redilab
RELES S.R.L.
RESTECH - AL BAHATHA FOR MEDICAL AND SCIENTIFIC EQPT.
Rilab

Table 506 - continued

Company
Ring biotechnology Co. Ltd.
Rodin SRL
Romer Labs
rqmicro
S&S Bioproducts Co., Ltd.
Safetyaro
Sartorius
Scientific Supply Co., Ltd.
SCIEX
Sesotec
Seward Ltd.
Shenzhen Bioeasy Biotechnology, Inc.
Shimadzu Corporation
SMART SCIENCE CO., LTD.
SMS Bio
Sortechnology SpA
Specifico & Co.
Spectacular Labs
SPECTRO Analytical Instruments
SPLABOR
Star Array Pte. Ltd.
SY-LAB
Synoptics Ltd
Taiwan Advanced Nanotech Inc.
Tecan
Tecnal
TestCheck
Testo
Thermo Fisher Scientific Inc.
ThermoPro UAE
ThermoWorks
Tianlong

Table 506 - continued

Company
Tradetec
Unisensor
VART
Veritide
VICAM
Waters Corporation
Yarok Microbio Ltd.
ZEULAB
山东海曼科学仪器有限公司

Sources & Evidence

1. About Us | Hygiena
   - Company verification: Hygiena's corporate history records its acquisition by EW Group in 2021.
   - Company verification: The company describes an international operating and distributor network supporting its food-safety instrument business.
   - Company verification: Its corporate history identifies the 2018 acquisition of Charles River's Celsis Dairy, Food & Beverage division. ([hygiena.com](https://www.hygiena.com/about-us))
2. About us - R-Biopharm AG
   - Company verification: Identifies R-Biopharm AG as a family-run business with food and feed analysis operations.
   - Company verification: Describes international subsidiaries and distributors, supporting the company's commercial reporting identity.
3. Neogen Outlines Strategy for Growth, Innovation and Margin Expansion at 2026 Investor Day
   - Company verification: The October xx.xx 2026 announcement confirms continuing Neogen Corporation operations and a dedicated Global Food Safety business.
   - Company verification: Describes an international food-industry customer base and offerings spanning pathogen detection, allergens, and sanitation monitoring; these are not equipment-only revenue disclosures.
4. Eurofins Technologies is now Gold Standard Diagnostics!
   - Company verification: Documents the December 2022 rebranding of Eurofins Technologies to Gold Standard Diagnostics.
   - Company verification: Explains that the branding covers its test-kit, reagent, and instrument development and manufacturing business.
5. About Gold Standard Diagnostics
   - Company verification: Identifies Gold Standard Diagnostics as a commercial network supplying diagnostic instruments to food and other industries.
   - Company verification: Currently presents ThunderBolt and The BOLT analyzer families alongside food-allergen, pathogen, mycotoxin, and residue-testing offerings.
6. Analytik Jena inaugurates new buildings | Endress+Hauser
   - Company verification: The October xx.xx 2026 announcement confirms continuing Analytik Jena development, manufacturing, and commercial operations.
   - Company verification: States that Analytik Jena has been wholly owned by Endress+Hauser since 2016.

7. Discover all IUL highlights with the last news - IUL Instruments
   - Company verification: Publishes a February xx.xx 2025 customer account connecting Eddy Jet 2W equipment with a Japanese food company's microbiological testing.
   - Company verification: Identifies a Japanese distributor in that commercial customer account.
8. Privacy Policy | Byonoy
   - Company verification: Identifies Byonoy GmbH as the company responsible for the website and provides its Hamburg business address.
   - Company verification: Establishes the legal operator behind the staged Byonoy market-facing identity.
9. Automated DNA Extraction | Maxwell Instruments | Automated RNA Extraction
   - Company verification: Commercially presents Maxwell instrument families and identifies a PureFood Pathogen food-testing application within the platform portfolio.
   - Company verification: Establishes a food-specific equipment-workflow role rather than relying solely on general molecular-instrument capability.
10. Food Testing | Promega
    - Company verification: Promega's commercial food-testing portfolio expressly addresses food pathogens and associated Maxwell instrument applications.
    - Company verification: Supports the company's participation in dedicated food-testing laboratory workflow equipment.
11. Food Safety Testing Solutions Since 1978 | Charm Sciences
    - Company verification: Identifies Charm Sciences as an operating food-safety testing business.
    - Company verification: Describes its food-contaminant testing focus, complementing captured reader offerings and government-listed reader associations.
12. Velaris and GERSTEL FAQs: Stronger Together, What It Means for You - Gerstel
    - Company verification: Identifies LCTech among brands operating under shared Velaris ownership.
    - Company verification: Supports a common-parent reporting relationship with GERSTEL, not an assumption that the two are independent consolidated competitors.
    - Company verification: Explains GERSTEL's participation in the Velaris laboratory-automation group.
    - Company verification: Identifies GERSTEL and LCTech within the same ownership platform while describing continued brand-level commercial operations.
13. Press Release LCTech GmbH
    - Company verification: The September xx.xx 2023 company announcement identifies LCTech within a laboratory-automation platform following acquisitions backed by Battery Ventures.
    - Company verification: Provides dated ownership-platform history rather than evidence of an independent LCTech parent group.
14. GERSTEL Solutions worldwide No. 20
    - Company verification: GERSTEL's company publication commercially discusses automation for mineral-oil-residue analysis in food and food packaging.
    - Company verification: Provides direct food-contaminant business support, although a complete current named-system offering and legal reporting assessment remain unresolved.
15. Impressum - ColiMinder
    - Company verification: Identifies VWMS Vienna Water Monitoring Solutions GmbH as the operator behind the ColiMinder website.
    - Company verification: Provides an Austrian company-register reference and describes the business as developing, manufacturing, and selling microbial water-monitoring equipment.
16. Novonesis Annual Report 2024
    - Company verification: Records completion of the Novozymes and Chr. Hansen combination on January xx.xx 2024.
    - Company verification: Establishes a successor-group reporting issue for the protected CHR Hansen title; it does not establish that CHR Hansen remains an independent consolidated competitor.

17. Incubators and readers | Novonesis
- Company verification: Novonesis commercially presents MilkSafe-linked readers and incubators for milk antibiotic-residue, aflatoxin, and adulteration testing.
- Company verification: Resolves the historical portfolio's hardware-only uncertainty at successor-group level, without resolving the protected CHR Hansen reporting title.

18. SABS Certificate of Registration - Microsep and National Separations
- Company verification: A SABS certificate identifies Microsep (Pty) Ltd and its owned subsidiary National Separations (Pty) Ltd.
- Company verification: The certificate's stated validity ended April xx.xx 2024; it supports historical identity and ownership, not current certification or unchanged ownership.
- Company verification: The historical certificate identifies National Separations (Pty) Ltd as owned by Microsep (Pty) Ltd.
- Company verification: Creates a reporting-overlap qualification; present ownership and consolidation still require confirmation.

19. About us | PerkinElmer
- Company verification: PerkinElmer's present company overview describes an operating analytical-instrument and laboratory-services business.
- Company verification: Supports continuing activity under the PerkinElmer market-facing identity, but does not independently resolve its ownership and legal consolidation perimeter.

20. Know What's in Your Food | Thermo Fisher Scientific
- Company verification: Offers molecular food-testing instrumentation, chromatography and mass-spectrometry equipment, and physical-contaminant inspection systems for food applications.

21. VIDAS KUBE | bioMérieux
- Company verification: Commercially offers VIDAS KUBE as an automated food-pathogen detection instrument, with ordering and sales-contact options.

22. bioMérieux Annual Report 2024
- Company verification: The 2024 annual report identifies GENE-UP food-industry offerings and reports use of specified tests by USDA FSIS laboratories.

23. Neogen MDS Awarded Contract from USDA Food Safety and Inspection Service
- Company verification: A June xx.xx 2024 announcement reports a USDA FSIS contract for the Neogen Molecular Detection System and associated food-pathogen testing products.

24. EnSURE Touch ATP Luminometer for Hygiene Monitoring | Hygiena
- Company verification: Offers the EnSURE Touch handheld ATP hygiene-monitoring instrument for food-processing cleaning verification.

25. CFX Opus 96 and CFX Opus Deepwell Real-Time PCR Systems for Food, Beverage, and Water Safety Testing
- Company verification: Markets CFX Opus xx.xx and CFX Opus Deepwell real-time PCR instruments for food, beverage, and water safety testing.

26. Food Safety and Authenticity Testing - Agilent High-Resolution Mass Spectrometry Workflows
- Company verification: Identifies the Agilent xx.xx LC/Q-TOF and xx.xx GC/Q-TOF instruments as offerings for food-contaminant screening and identification.

27. Food Contaminant Testing | Reliable LC-MS/MS & GC-MS/MS | Waters
- Company verification: Offers LC-MS/MS and GC-MS/MS food-contaminant testing solutions and identifies Xevo mass-spectrometry and APGC equipment.

28. Solutions for Food Safety | Shimadzu Corporation
- Company verification: Markets LCMS-based food-safety solutions covering pesticide residues, veterinary drugs, natural toxins, and allergens.

29. Food Testing Solutions | SCIEX
- Company verification: Offers mass-spectrometry instruments and associated software for food safety, residue, and contaminant testing.

30. Danaher | SCIEX
    - Company verification: Identifies SCIEX as a life-sciences company within Danaher Corporation.
31. MALDI Biotyper for Food Microbiology | Bruker
    - Company verification: Offers the MALDI Biotyper instrument for food-microbiology identification and confirmation applications.
32. Food Testing Solutions | PerkinElmer
    - Company verification: Offers QSight xx.xx LC/MS/MS and Clarus Nova GC equipment to food manufacturers and testing laboratories for contaminant analysis.
33. RIDA SMART BOX - Food & Feed Analysis | R-Biopharm
    - Company verification: Offers the RIDA SMART BOX imaging instrument for quantitative allergen and mycotoxin lateral-flow testing in food and feed laboratories.
34. Charm SL Aflatoxin M1 Test (SLAFM) | Charm Sciences
    - Company verification: Offers Charm EZ and ROSA Pearl-X reader systems associated with dairy aflatoxin and antibiotic screening.
35. AgraVision Pro Reader | Romer Labs
    - Company verification: Lists AgraVision Pro as an available reader for AgraStrip Pro mycotoxin, GMO, and allergen tests.
36. Gold Standard Diagnostics Product Catalogue - Industrial and Animal Health 2025
    - Company verification: The 2025 catalog offers ThunderBolt and The BOLT analyzers for food allergens, pathogens, mycotoxins, and veterinary-drug residue assays.
37. BacSomatic | FOSS
    - Company verification: Offers BacSomatic for bacterial and somatic-cell counting associated with raw-milk hygienic quality.
38. Instruments - Microbiological Testing | Sartorius
    - Company verification: Offers microbiological instruments for food and beverage laboratories, including Microsart pumps and manifolds and MD8 air samplers.
39. Food & Beverage Safety Portfolio | Merck
    - Company verification: The food and beverage portfolio identifies Merck KGaA and instrument families including DiluCult, Milliflex OASIS, and MAS environmental-monitoring systems.
40. Lumitester Smart | Kikkoman Biochemifa
    - Company verification: Commercially presents Lumitester Smart as a hygiene-monitoring instrument.
    - Company verification: Identifies Kikkoman Biochemifa Company and OPTEX Co., Ltd. as co-developers.
    - Company verification: Kikkoman's marketed Lumitester Smart product page identifies OPTEX Co., Ltd. as a co-developer; it does not establish OPTEX's current sales role.
41. Product Inspection Systems | METTLER TOLEDO
    - Company verification: Offers food-industry metal-detection and X-ray equipment for physical-contamination inspection.
42. Dymond X-Ray Inspection System | Minebea Intec
    - Company verification: Offers Dymond X-ray equipment for detecting foreign objects in packaged food.
43. X-Ray Inspection | Loma Systems
    - Company verification: Offers the X5 series of food X-ray inspection systems for foreign-contaminant detection.
44. X-Ray Inspection Systems for Food & Pharmaceutical Products | Anritsu
    - Company verification: Offers XR75 X-ray inspection equipment for detecting physical contaminants in food and pharmaceutical products.
45. QuickScan - Quantify Mycotoxins and GMOs with One Traceability System | EnviroLogix
    - Company verification: Offers QuickScan reader systems for grain companies and food processors, including mycotoxin and allergen applications.

46. BactoCount IBC Brochure | Bentley Instruments
    - Company verification: Markets BactoCount IBC equipment for assessing raw-milk hygienic quality in dairy plants and milk-testing laboratories.
47. BagMixer 400 P - Lab Blender | Interscience
    - Company verification: Offers the BagMixer xx.xx P laboratory blender for food-industry microbiological analysis.
48. Company | IUL
    - Company verification: Identifies IUL, SA as a microbiology-automation supplier that designs, manufactures, and markets lateral-flow readers for food applications and supplies OEM products.
49. Products - IUL Micro | IUL Instruments
    - Company verification: Lists microbiology equipment categories including homogenizers, gravimetric dilutors, colony counters, and air-sampling instruments.
50. Equipment | ProGnosis Biotech
    - Company verification: Offers 3PR Mini and S-FLOW readers for food-safety testing.
    - Company verification: Identifies Lateral Logic as its subsidiary and states that it offers Byonoy Absorbance xx.xx under a partnership.
    - Company verification: ProGnosis identifies a partnership under which it offers Byonoy's Absorbance xx.xx reader.
51. Absorbance 96 - A New Category of Plate Reader | Byonoy
    - Company verification: Commercially offers the Absorbance xx.xx microplate reader through its own product portfolio.
52. Food & Agriculture | Analytik Jena
    - Company verification: Markets PlasmaQuant MS and PlasmaQuant xx.xx instruments for food safety and identifies additional food-testing automation and molecular-instrument offerings.
53. About Seward | Seward
    - Company verification: Manufactures Stomacher laboratory blenders for food-testing applications at its United Kingdom factory.
    - Company verification: States that Seward became part of the FermionX group in 2016.
54. About CEM
    - Company verification: Identifies CEM Corporation's food-analysis and elemental-analysis sample-preparation equipment businesses; the page does not establish a named current food-safety offering.
55. Molecular Biology | HiMedia Laboratories
    - Company verification: Identifies HiGenoMB as a division of HiMedia Laboratories and describes molecular instruments serving food and water testing, among other industries.
56. Portable Food Safety Reader | Kwinbon
    - Company verification: Offers a Portable Food Safety Reader explicitly identified as developed and produced by Beijing Kwinbon Technology Co., Ltd.
57. FGIS Performance Verified Mycotoxin Test Kits - Tables Updated October 15, 2026
    - Company verification: Lists Charm mycotoxin tests with the EZ-M Reader.
    - Company verification: Lists EnviroLogix tests with QuickScan readers.
    - Company verification: Lists Neogen Veratox Aflatoxin with Stat Fax Reader Model xx.xx.
    - Company verification: Lists R-Biopharm testing with RIDA SMART BOX.
    - Company verification: Lists Romer Labs tests with AgraVision Pro.
    - Company verification: Lists ProGnosis tests with S-FLOW and 3PR-MINI readers.
    - Company verification: Identifies BYONOY xx.xx equipment for listed ProGnosis tests.
    - Company verification: Lists VICAM tests with Vertu TOUCH and Series-4EX equipment.

58. News - Certification Announcements | MicroVal
    - Company verification: Records certification activity for Bruker MALDI Biotyper food-microbiology applications.
    - Company verification: Records certification activity for FOSS BactoScan raw-milk testing instruments.
    - Company verification: Records certification activity for Bentley BactoCount devices.
    - Company verification: Records certification of a bioMérieux GENE-UP food-pathogen detection application.
59. QuickScan Support | EnviroLogix Brazil
    - Company verification: Provides a Brazilian Portuguese commercial support page for QuickScan equipment.
60. iQ-Check Listeria monocytogenes II PCR Detection Kit | Bio-Rad
    - Company verification: The inspected iQ-Check Listeria monocytogenes II page marks the listed kit discontinued while describing Bio-Rad's associated PCR instrument offering.
61. SNAPshot DSR Reader - IDEXX US
    - Company verification: IDEXX publicly offers the SNAPshot DSR Reader for reading its dairy SNAP tests.
    - Company verification: The US product page provides customer-service and ordering channels for the reader.
62. Clear Safety - Clear Labs
    - Company verification: Clear Labs markets Clear Safety as an automated food-pathogen testing platform.
    - Company verification: The portfolio addresses Listeria and Salmonella characterization for food-safety programs.
63. About Clear Labs - Clear Labs
    - Company verification: Clear Labs describes food safety as a commercial application of its automated genomic platforms.
    - Company verification: Its company history documents the Clear Safety launch and a US operating presence.
64. Products - Biolog
    - Company verification: Biolog offers Odin and ID Station instruments for microbial identification and characterization.
    - Company verification: Its product portfolio explicitly serves food and beverage organizations as well as other industries.
65. Environmental Monitoring and QC - Biolog
    - Company verification: Biolog markets environmental-monitoring and quality-control capabilities and identifies food and beverage as a served application area.
    - Company verification: The page distinguishes instrumentation from outsourced laboratory services.
66. Inside Ancera's Labs
    - Company verification: A November xx.xx 2024 business article identifies Ancera's Branford, Connecticut laboratory operations.
    - Company verification: Ancera describes PIPER as its proprietary diagnostic instrument deployed within its poultry-focused food-defense business.
    - Company verification: The article establishes an instrument-enabled business role, not standalone hardware sales.
67. About - Pathotrak
    - Company verification: Pathotrak identifies its business as providing technologies for food-safety laboratories and producers.
    - Company verification: Its company history connects the business with the University of Maryland and NIST.
    - Company verification: This page establishes company identity and commercial focus but does not independently resolve current named hardware availability.
68. Determination of Pesticides in Tomato by GCxGC-TOFMS
    - Company verification: LECO associates its Pegasus BT instrument with pesticide analysis in tomatoes.
    - Company verification: The equipment-linked page explicitly positions this application within food-safety requirements.

69. About | Addium Inc.
    - Company verification: Addium identifies its business presence in Pullman, Washington.
    - Company verification: Its company materials connect the AQUALAB business with food-safety applications.
    - Company verification: The inspected company page does not by itself establish current availability of an individual instrument model.
70. Food Processing - ThermoWorks
    - Company verification: ThermoWorks markets instruments specifically for professional food-processing and food-safety applications.
    - Company verification: The offered portfolio includes the Saf-T-Log Paperless HACCP Thermometer and professional temperature-monitoring instruments.
71. About Us - ThermoWorks
    - Company verification: ThermoWorks describes itself as a family-owned Utah company.
    - Company verification: Its business materials identify professional food chains among the markets served by its instruments.
72. about us - DeltaTrak
    - Company verification: DeltaTrak describes the development and manufacture of portable temperature instruments, data loggers, and monitoring systems.
    - Company verification: The company explicitly identifies food and food safety among its served industries.
73. Food Testing Equipment | Hanna Instruments
    - Company verification: Hanna Instruments markets equipment explicitly addressing food safety and product integrity.
    - Company verification: Its food-testing catalog lists the HI99161 food and dairy pH meter and HI98161 Professional Foodcare Portable pH Meter.
74. SpectacularOne - On-Site Pathogen Testing Device | Spectacular Labs
    - Company verification: Spectacular Labs advertises SpectacularOne as an on-site food-pathogen detection device.
    - Company verification: The Canadian-facing product page offers a demonstration pathway for prospective customers.
    - Company verification: Advertising and demonstrations do not establish customer shipments or independently verified certification.
75. Automated Liquid-Liquid Extraction (LLE) Systems - Aurora Biomed
    - Company verification: Aurora Biomed markets VERSA xx.xx and VERSA xx.xx automated sample-preparation equipment.
    - Company verification: The commercial page identifies aflatoxins in seafood products among the equipment's applications.
76. Luminultra and Kikkoman Partnership: Food Safety Testing
    - Company verification: On September xx.xx 2025, Canada-headquartered Luminultra announced a North American distribution agreement with Kikkoman Biochemifa.
    - Company verification: The stated offering includes Kikkoman's A3 hygiene-monitoring system and a colony-counting system for Easy Plate.
    - Company verification: The announcement establishes a channel relationship, not separate manufacturing ownership of Kikkoman equipment.
77. About Kormay Biomedicals
    - Company verification: Kormay Biomedicals identifies itself as a Canadian laboratory supplier serving customers across Canada.
    - Company verification: It identifies food-production facilities among its customers and lists food-safety tests and laboratory equipment in its portfolio.
    - Company verification: The page does not identify a named food-safety-specific hardware offering.

78. Dissel Mexicana | Inocuidad Alimentaria y Control de Higiene
    - Company verification: Dissel Mexicana advertises equipment for food and beverage safety and hygiene monitoring.
    - Company verification: Its offering page identifies the YZ3900 ATP luminometer.
    - Company verification: The page establishes an advertised supplier role but does not establish equipment manufacturing ownership.
79. NEOGEN - Biodinamix
    - Company verification: Biodinamix advertises Neogen's Petrifilm Plate Reader Advanced and LM1 hygiene-monitoring equipment.
    - Company verification: The business page identifies locations in Monterrey, Chihuahua, and Torreón.
    - Company verification: This establishes a stated Mexican equipment-channel role, not independent manufacture or exclusive authorization.
80. Interceptor Metal Detector | Fortress Technology Inc.
    - Company verification: Fortress Technology Inc. currently advertises the Interceptor Metal Detector for contaminants in food products.
    - Company verification: The offering explicitly addresses food processing, including meat, dairy, and prepared foods.
81. About - Fortress Technology
    - Company verification: Fortress identifies its Toronto, Ontario business address.
    - Company verification: Its company overview describes metal detectors and X-ray inspection systems serving food manufacturers.
    - Company verification: The stated business address is not independently treated as proof of Canadian manufacturing.
82. HOMOGENEIZADOR STOMACHER - AGI.130 - Ethik
    - Company verification: Markets the AGI.xx.xx sample homogenizer for food-related microbiological applications.
    - Company verification: The offering is presented under the Ethik supplier identity.
83. Homogeneizador | Marconi - Equipamentos para Laboratório
    - Company verification: Lists the MA440/CF microbiological sample homogenizer.
    - Company verification: Identifies Marconi Equipamentos Para Laboratórios Ltda and a Piracicaba, Brazil address.
84. Tecnal - HOMOGENEIZADOR DE AMOSTRAS - INT-BAGMIXER-400-S
    - Company verification: Commercially lists INT-BAGMIXER-xx.xx-S microbiological sample-preparation equipment.
    - Company verification: Provides Tecnal's Piracicaba, Brazil commercial address and food-industry specialist contact.
    - Company verification: The listing describes a French equipment manufacturer, supporting a channel-role qualification rather than an assumption of Tecnal manufacture.
85. Indústria Alimentícia - Akso
    - Company verification: Its food-industry catalog lists named pH, chlorine, and related analytical instruments, including AK400.
    - Company verification: The page identifies AKSO Produtos Eletrônicos Ltda and a São Leopoldo, Brazil address.
    - Company verification: Food-industry positioning does not by itself separate safety monitoring from quality or process-control applications.
86. Luminómetro ATP: 5 beneficios del Clean-Trace para verificar la higiene | Rodin SRL
    - Company verification: An August xx.xx 2026 company article commercially presents Neogen Clean-Trace equipment for food-industry hygiene verification.
    - Company verification: Describes purchase-related technical support by Rodin.

87. Redilab - Insumos para la Industria alimenticia
    - Company verification: Its environmental-monitoring catalog offers the Neogen Clean Trace LM1 luminometer.
    - Company verification: Identifies Redilab as a food-safety-products commercial business and supplies Argentine contact information.
88. SystemSURE Plus: luminómetro ATP portátil | BioCheck
    - Company verification: Offers Hygiena SystemSURE Plus through a Chilean commercial catalog for food-safety hygiene verification.
    - Company verification: The page provides Santiago contact information and identifies BioCheck SPA.
    - Company verification: The listing includes quotation and purchase functionality, establishing an advertised equipment offering rather than only an assay or service.
89. Nosotros - Miuras
    - Company verification: Describes supplying specialized equipment to food-related industries.
    - Company verification: States that it represents Hygiena's Qualicon line and BAX pathogen-detection system in Colombia.
90. RELES S.R.L - Equipos de Laboratorio
    - Company verification: Identifies RELES S.R.L. as a Peruvian laboratory-equipment and instrument business.
    - Company verification: Advertises technical service for named Neogen platforms, including MDS, Petrifilm readers, Soleris, Raptor, and hygiene-monitoring instruments.
    - Company verification: This page establishes an aftermarket role, not sales of each listed food-safety instrument.
91. Luminómetro MVP ICON - Quimiem
    - Company verification: Explicitly identifies Quimiem as a distributor of the MVP ICON luminometer in Ecuador.
    - Company verification: Positions the instrument in hygiene-monitoring applications.
92. Agrobiotek | Sobre Nosotros
    - Company verification: Describes AgroBioTek's equipment-provision business and Honduran origins.
    - Company verification: Identifies its regional business presence in Honduras, Guatemala, El Salvador, Nicaragua, and the Dominican Republic.
    - Company verification: The group is presented as one regional business rather than independent additions for each office.
93. Agrobiotek Internacional
    - Company verification: Maintains a commercial catalog category for mycotoxin-detection readers.
    - Company verification: The inspected rendered page does not identify a specific current reader model.
94. Charm EZ Protect+ | Análisis rápido de antibióticos y aflatoxina M1 en leche | PEF Analysis
    - Company verification: Offers Charm EZ Protect+ through its Uruguay-facing equipment catalog.
    - Company verification: Identifies dairy antibiotic-residue and aflatoxin testing as the commercial application.
    - Company verification: Provides a quotation route for the named instrument.
95. Luminómetro 3M Clean Trace Instrument- LM1 - Mavar
    - Company verification: Lists the Clean Trace LM1 luminometer within its food-safety portfolio.
    - Company verification: Provides Montevideo, Uruguay commercial contact information.
    - Company verification: The page retains legacy 3M branding, leaving current manufacturer-channel arrangements unresolved.
96. Sobre nosotros - ITS Technologies
    - Company verification: Provides company-background support for ITS Technologies' instrumentation and equipment-support business.
    - Company verification: The inspected company page does not establish a named current food-safety instrument offering.

97. Sortechnology | Asegurando la inocuidad de sus alimentos.
    - Company verification: Presents food-industry metal detectors, X-ray inspection systems, and laboratory-analysis equipment.
    - Company verification: Describes a family business with Chilean commercial and technical support.
    - Company verification: Its physical-hazard inspection participation remains conditional on the unresolved market boundary.
98. Quienes Somos - Rilab®
    - Company verification: Describes Rilab as a family business serving analytical, food-safety, and other industrial applications in Chile.
    - Company verification: States that it represents international brands and provides technical support.
    - Company verification: A named food-safety hardware offering was not established by the inspected company profile.
99. SY-LAB - BacTrac 4300
    - Company verification: Commercially presents BacTrac xx.xx for microbiological testing of food and food ingredients, including indicator organisms and pathogens.
100. Food Industry - Alliance Bio Expertise
    - Company verification: Offers DILUWEL, MIXWEL, MEDIAWEL, and AIRWEL equipment for food-industry microbiology laboratories.
    - Company verification: States that its machines are designed and manufactured in France and provides a Bruz business address.
101. Company - Promicol
    - Company verification: Describes Promicol as privately owned and a supplier of microbial-contamination screening systems.
    - Company verification: Identifies a commercial sales role serving food and beverage customers.
102. Equipment - Promicol
    - Company verification: Lists PROMILITE M1, PROMILITE M4A, PROMITEC xx.xx and robotic equipment for its microbial ATP testing portfolio.
103. Contact - Promicol
    - Company verification: Provides Promicol's commercial contact address in Geleen, Netherlands.
104. Synbiosis - Synoptics
    - Company verification: Offers Synbiosis colony-counting equipment, including ProtoCOL xx.xx and AutoCOL.
    - Company verification: Publishes a customer example involving food testing for Salmonella and E. coli and identifies Cambridge headquarters.
105. About Synbiosis - Synoptics
    - Company verification: Identifies Synbiosis as a Synoptics division and states that SDI Group plc has owned Synoptics Ltd since December 2007.
106. 50 years of Culturing Innovation - Don Whitley Scientific
    - Company verification: The January xx.xx 2026 business announcement describes an independent family-run equipment manufacturer serving food and water laboratories.
    - Company verification: Identifies English manufacturing and microbiology automation offerings, including spiral-plating and liquid-handling equipment.
107. The FREESTYLE Robotic System - LCTech
    - Company verification: Markets FREESTYLE robotic equipment for food/feed laboratory sample preparation.
    - Company verification: Identifies commercial configurations addressing mycotoxins, pesticides, and MOSH/MOAH.
108. MEKI Compact Food X-Ray Inspection System - Mekitec
    - Company verification: Markets the MEKI food X-ray system for foreign-object detection and identifies the supplier as Mekitec Oy.
    - Company verification: Includes a named Liebhart's Group customer statement concerning commercial use.

109. ICGENE Mini - Enbiotech
    - Company verification: Commercially presents ICGENE Mini molecular-analysis equipment.
    - Company verification: Explicitly identifies food applications involving named foodborne organisms.
110. Fish and seafood - BioSystems
    - Company verification: Offers the Y15 analyzer for fish and seafood analysis, including histamine and sulfite testing.
    - Company verification: Publishes an Asdomar laboratory customer statement about Y15 histamine analysis.
111. Histamine - BIOLAN
    - Company verification: Lists BIOFISH xx.xx HIS and BIOFISH xx.xx HIS instruments for histamine measurement in fish.
    - Company verification: Provides a Zamudio, Bizkaia commercial contact address.
112. Quality Assurance for Bottled Water & Fruit Juice - Diamidex Solutions
    - Company verification: Markets MICA microbial detection and enumeration solutions to bottled-water and fruit-juice producers.
    - Company verification: Identifies offerings covering indicator organisms and microbial contamination.
113. Diamidex Attracts eur 2 million Investment from PureTerra to Scale its Microbial Detection Solutions
    - Company verification: The November 2023 company announcement identifies Diamidex as based in Marseille and reports investment by PureTerra and existing shareholders.
    - Company verification: Associates its MICA equipment business with microbial monitoring in food and beverage industries.
114. About Axel Semrau
    - Company verification: Identifies Axel Semrau as part of Trajan and a developer of its own laboratory hardware and software.
    - Company verification: Markets CHRONECT automation, including a Symbiosis offering associated with glyphosate analysis in food.
115. Food/Feed and Beverages Applications - KNAUER
    - Company verification: Its commercial food/feed chromatography portfolio explicitly addresses mycotoxin analysis.
    - Company verification: The inspected page establishes food-contaminant application participation but not a named current food-specific hardware configuration.
116. Microwave Digestion System: Multiwave - Anton Paar
    - Company verification: Markets Multiwave analytical sample-preparation instruments for food and other laboratory applications.
    - Company verification: Its commercial product page identifies food trace-element and fish mercury-analysis application categories.
117. ReadSensor 2 - APP088 - Unisensor
    - Company verification: Commercially lists ReadSensor xx.xx as reader hardware for Unisensor test strips.
    - Company verification: Provides the supplier's Seraing, Belgium address.
118. Drug Residue & Contamination Testing Kits for Food Diagnostics - Unisensor
    - Company verification: Describes Unisensor's own food-diagnostics portfolio for antibiotics, mycotoxins, and other contamination concerns.
    - Company verification: Identifies the company as Belgian and describes its distributor route to market.
119. Laboratory Instruments - AAA 500 - INGOS s.r.o.
    - Company verification: Markets AAA xx.xx analytical equipment for amino acids and biogenic amines, with food/feed control among its stated applications.
120. Kontakty divize Laboratorní přístroje - INGOS s.r.o.
    - Company verification: Identifies INGOS s.r.o.'s Laboratory Instruments Division and its Prague business address.

121. About the division - INGOS
    - Company verification: Describes INGOS's development and manufacture of laboratory instruments and lists AAA xx.xx and LC xx.xx in its product program.
122. Bioavlee S.A. - Company Page
    - Company verification: The company-authored page identifies Bioavlee S.A. in Wrocław and describes laboratory-equipment development.
    - Company verification: The inspected material does not establish a current food-safety instrument offering.
123. Food and beverage - Metrohm
    - Company verification: Offers analytical instruments to food/beverage laboratories and explicitly includes contaminant and preservative measurement.
124. Ion chromatographs - Metrohm
    - Company verification: Lists OMNIS IC, xx.xx Professional IC Vario, and xx.xx Compact IC Flex instrument families.
    - Company verification: Describes Swiss-made instruments and support for food-testing laboratories.
125. Food Thermometers - Testo
    - Company verification: The official UK store markets food-safety thermometers to professional kitchens, restaurants, and supermarkets.
    - Company verification: Specifically presents the testo xx.xx-IR food thermometer.
126. Foodcare Meters and Testers - Hanna Instruments Romania
    - Company verification: The Romanian commercial catalog markets Foodcare pH instruments for food-safety and HACCP-related applications.
    - Company verification: Identifies HANNA INSTRUMENTS SERVICE S.R.L. as the local commercial entity.
127. ISO 9001:2015 Certificate - HANNA INSTRUMENTS S.R.L.
    - Company verification: The certificate identifies HANNA INSTRUMENTS S.R.L. in Nușfalău, Romania, with analytical-device manufacturing and related activities.
    - Company verification: The stated certificate validity runs from November xx.xx 2023, through October xx.xx 2026.
128. LAB PROFILE - DMA-80 | FOOD - Aquagro
    - Company verification: The manufacturer case profile connects DMA-xx.xx evo equipment with Aquagro's seafood mercury-control business.
    - Company verification: Identifies Milestone Srl at Sorisole, Italy, and reports customer installations in 2019 and 2021.
129. Anatolia Geneworks - Food Safety Product List
    - Company verification: The Anatolia Geneworks food-safety catalog lists the UNIO M32 Extraction System as an instrument for biological and food samples.
130. Hygiena - RESTECH - AL BAHATHA FOR MEDICAL AND SCIENTIFIC EQPT.
    - Company verification: The distributor catalog names BAX System, Innovate, EnSURE Touch, SystemSURE Plus, and Dualo xx.xx R2 offerings for food-testing or hygiene-monitoring applications.
    - Company verification: The page provides Riyadh headquarters and Jeddah and Alkhobar branch contacts in Saudi Arabia.
131. Food Processing - Perfect Vision Trading & Services LLC
    - Company verification: Lists EnSURE Touch for sanitation verification, including food-safety applications, and provides Perfect Vision Trading & Services LLC's Muscat corporate address.
132. Food Testing Equipment in Kuwait | Burgan Equipment Co.
    - Company verification: Advertises food-contaminant testing equipment in Kuwait and hygiene-monitoring solutions for environments where food is handled.
133. Food Safety and Microbiology Testing Solutions GCC | REDALAB
    - Company verification: Markets colony counters, microbial detection systems, rapid pathogen detection systems, sample homogenizers, and ATP hygiene-monitoring systems to food producers and laboratories.
    - Company verification: States service coverage including Dubai, Abu Dhabi, Riyadh, and Muscat.

134. Food safety instruments | Testo Middle East Dubai
    - Company verification: The UAE commercial catalog lists food thermometers, frying-oil testers, and pH meters under Food Safety and provides a Dubai showroom contact.
135. COMPANY | Yarok Microbio
    - Company verification: Identifies Yarok Microbio Ltd. as a Jerusalem-based developer of a microbiological testing system for the fresh-food industry and production-environment control.
136. Merck Food Safety Testing | Gulf Scientific Corporation
    - Company verification: Promotes Merck food-and-beverage testing packages addressing contaminants, microbiology, and hygiene, with commercial inquiries directed to Gulf Scientific Corporation.
137. Partners | MSS-Modern Scientific Supplies | Jordan
    - Company verification: Lists PerkinElmer food-safety/quality solutions and JRI monitoring solutions among represented partners within its Jordanian laboratory-distribution business.
138. Food Safety | elwan LABTECH Supply
    - Company verification: The official food-safety product category includes ATP Monitoring and Food Microbiology offerings.
139. Syria - Pharma Test
    - Company verification: Pharma Test identifies VART in Damascus as its exclusive Syrian distributor.
    - Company verification: The channel description includes food-industry laboratory customers, without identifying a food-safety-specific instrument.
140. Microsep - Vertu Touch Lateral Flow Reader - Quantify Mycotoxins in Minutes
    - Company verification: Microsep publicly markets the VICAM Vertu TOUCH reader for mycotoxin testing in food and agricultural applications and provides a quotation route.
141. BAX® System Q7 - Molecular Pathogen Detection
    - Company verification: The NATSEP commercial catalog offers Hygiena BAX System Q7 equipment for food-safety pathogen detection through a quotation channel.
142. Hygiena® EnSURE® Touch - Hygiena | Beckman Egypt
    - Company verification: Beckman Egypt lists the Hygiena EnSURE Touch instrument in its commercial product catalog.
143. Brands we represent - Beckman Egypt
    - Company verification: Beckman Egypt states that it supplies, installs, and supports represented equipment in Egypt and includes Hygiena among its represented brands.
144. Portable ATP Hygiene Monitoring System Hygiene | ECC Algérie
    - Company verification: ECC Algérie lists a portable ATP hygiene-monitoring system under its Hygiena category and publishes a Bejaia, Algeria business address.
145. EnSURE | ECC Algérie
    - Company verification: ECC Algérie includes an EnSURE offering in its public equipment catalog.
146. AgraVision™ Pro Reader | LabMart Limited
    - Company verification: LabMart Limited lists the AgraVision Pro Reader in a Ghana-facing storefront displaying Ghana-cedi currency.
147. Food & Beverages - Katchey Company Limited
    - Company verification: Katchey Company Limited maintains a food and beverage business page covering laboratory equipment and publishes its Lagos, Nigeria contact location.
148. Services - Katchey Shop
    - Company verification: Katchey's official shop identifies Katchey Company Limited as a laboratory-products supplier serving food and beverage users and self-describes the business as wholly Nigerian-owned.
149. Partners - PRECUR CHEM TECHNOLOGIES LIMITED
    - Company verification: Precur Chem Technologies describes supplying laboratory instruments across Tanzania.
    - Company verification: Its partner portfolio includes Interscience microbiology equipment categories associated with food-analysis laboratories.

150. Water & Quality Testing Equipment for Food & Beverage in Kenya | Labearer Court Limited
   - Company verification: Labearer Court markets named Lovibond photometers and spectrophotometers to Kenyan food and beverage operations.
   - Company verification: Its stated applications include process and rinse water testing, microbial testing, and chlorine or disinfection-residual monitoring.
151. Products - Archiepollo Solutions Limited
   - Company verification: Archiepollo Solutions lists analytical and microbiology equipment and a food-processing and testing supply category in its commercial portfolio.
152. Chemoquip Products| Laboratory & Diagnostic Equipment Kenya
   - Company verification: Chemoquip describes supplying laboratory equipment to food and dairy users among other East African sectors, with installation and after-sales support.
153. Hach Technologies Products - Nesvax Innovations
   - Company verification: Nesvax Innovations describes a Kenyan Hach distribution appointment covering laboratory and online instruments.
   - Company verification: Its food-industry portfolio lists named sampling and analytical equipment, although safety-specific attribution is not established.
154. Vente appareil de mesure tunisie | Instrument de mesure - SMS Bio
   - Company verification: SMS Bio advertises measurement-equipment sales in Tunisia to agro-food laboratories, including pH and temperature instrument categories.
155. Gemicatech | Lab Equipment Suppliers in Egypt | Authorized Distributor
   - Company verification: Gemicatech describes its own laboratory-equipment distribution business in Egypt and identifies food and beverage laboratory users and microbial-testing equipment among its addressed offerings.
156. A propos - Tradetec
   - Company verification: Tradetec identifies its Moroccan laboratory-products distribution business; this establishes the supplier lead but does not resolve a named food-safety hardware offering.
157. Gas Chromatograph Mass Spectrometer - Jiangsu Skyray Instrument
   - Company verification: The official catalog identifies Jiangsu Skyray Instrument Co., Ltd. and offers the GC-MS xx.xx.
   - Company verification: The product page explicitly identifies pesticide-residue and other food-safety applications.
158. Feyond-S400
   - Company verification: Allsheng publicly offers the Feyond-S400 reader.
   - Company verification: Its commercial product description explicitly identifies food safety among the instrument's application fields.
159. About - Hangzhou Allsheng Instrument Co., Ltd.
   - Company verification: The company profile identifies Hangzhou Allsheng Instrument Co., Ltd. and describes instrument development, production, and sales.
   - Company verification: The official page provides a Hangzhou, China business address.
160. Food & Beverages - Elico
   - Company verification: Elico markets analytical equipment for food and beverage contaminant, adulteration, and safety applications.
   - Company verification: The application page lists named instruments, including SL xx.xx AQUASpec and LI xx.xx.
161. Corporate Information - Elico
   - Company verification: Elico describes itself as an analytical-instrument design and manufacturing business headquartered in Hyderabad, Telangana, India.
   - Company verification: Its business description identifies domestic and international customers.

162. Pesticides - JEOL Ltd.
    - Company verification: JEOL's official commercial page presents the JMS-TQ4000GC UltraQuad TQ for analysis of residual pesticides in food.
163. Food & Beverage - HORIBA
    - Company verification: HORIBA's Singapore-localized food and beverage portfolio markets spectroscopic instruments for chemical identification and organic-contaminant analysis.
    - Company verification: The portfolio includes Raman and A-TEEM fluorescence categories; this does not establish a local installed base.
164. HACCP - ATAGO CO., LTD.
    - Company verification: ATAGO explicitly markets measuring instruments, including pH meters, for HACCP-based food hygiene management.
    - Company verification: The page supports a hazard-control monitoring role, not blanket inclusion of all composition or quality instruments.
165. AD-4976 - Metal Detector - A&D
    - Company verification: A&D's official product catalog offers AD-xx.xx series metal detectors for metal-contamination inspection.
    - Company verification: The page establishes inspection hardware, while the food-specific commercial application and market-boundary treatment remain qualified.
166. Food Analysis - Food Quality Control & Assurance - Hitachi High-Tech
    - Company verification: Hitachi High-Tech Analytical Science markets benchtop XRF equipment for food-contaminant and regulated-substance analysis.
    - Company verification: Its food-industry portfolio also contains quality-control applications that require separate safety attribution.
167. Food Safety - TANBead Application & Support
    - Company verification: The TANBead food-safety page identifies Taiwan Advanced Nanotech Inc. as the supplier behind the brand.
    - Company verification: It explicitly offers automated extraction instruments for food-safety applications alongside its reagent portfolio.
168. Food Safety - Camtech Diagnostics
    - Company verification: Camtech Diagnostics offers mycotoxin tests with a dedicated reader.
    - Company verification: Its food-safety portfolio also presents the BluLine Portable Fecal Detector as partner-produced equipment.
    - Company verification: Camtech identifies Veritide as the producer of the BluLine Portable Fecal Detector in its own commercial partner offering.
169. Who We Are - Camtech Diagnostics
    - Company verification: Camtech describes launched food-safety products and identifies Singapore research and manufacturing operations.
    - Company verification: The business page also identifies operations in the United Kingdom and Germany.
170. XDive Instrument - Star Array Pte. Ltd.
    - Company verification: Star Array publicly offers the XDive real-time PCR instrument and an OEM platform role.
    - Company verification: Its commercial page explicitly includes food-safety inspection among the platform's applications.
171. Contact Us - Star Array Pte. Ltd.
    - Company verification: The official contact page identifies Star Array Pte. Ltd. and a Singapore business address.

172. Hygiene ATP Testing Meter - Bioeasy International
    - Company verification: Bioeasy International Sdn Bhd advertises ATP hygiene-monitoring meters for Malaysian food-manufacturing and processing businesses.
    - Company verification: The page identifies a Kuala Lumpur business location; it does not resolve ownership or affiliation with Shenzhen Bioeasy.
173. Food Safety Division - Premier Diagnostics
    - Company verification: Premier Diagnostics' Malaysian Food Safety Division lists Lumitester Smart ATP-meter equipment.
    - Company verification: The catalog establishes an equipment-channel role and identifies a Shah Alam, Malaysia business location.
174. Our Products - Veritide
    - Company verification: Veritide's product page markets BluLine portable fecal-contamination screening equipment for meat processors.
    - Company verification: The offering establishes contamination-screening equipment rather than direct identification of individual pathogens.
175. Biolum 手持式 ATP 荧光检测仪 - 天隆
    - Company verification: Tianlong's official Chinese catalog markets the Biolum ATP hygiene-monitoring instrument.
    - Company verification: The commercial description explicitly includes food-processing and catering applications.
176. PCR Solution & In Vitro Diagnostics Company - Tianlong
    - Company verification: Tianlong's English business overview describes a China-origin instrument and reagent supplier.
    - Company verification: It identifies food safety among the company's commercial application areas.
177. Food Safety & Quality - Everest
    - Company verification: Everest maintains a dedicated Food Safety & Quality commercial catalog.
    - Company verification: This catalog establishes food-safety business activity but does not, by itself, resolve the retained MBRTec hardware lead.
178. Business Outlines - JASCO Global
    - Company verification: JASCO describes the development and manufacture of spectroscopy and chromatography instruments.
    - Company verification: Its business description identifies food products among instrument applications; a specific current contaminant-testing offering remains unresolved.
179. Digital PCR in Food Safety Testing | QIAGEN
    - Company verification: Markets QIAcuity-linked digital PCR food-safety testing, including pathogen, allergen, and contaminant applications. ([qiagen.com](https://www.qiagen.com/us/applications/digital-pcr/applications/food-testing))
180. LANDING CAPSCAN & IRIS ENG | Zeulab
    - Company verification: Advertises the IRIS reader with CapScan for chloramphenicol testing in milk. ([zeulab.com](https://www.zeulab.com/en/landing-capscan-iris-eng/))
181. Delvotest® | dsm-firmenich Taste, Texture & Health
    - Company verification: Its Delvotest commercial portfolio lists DelvoScan and Delvotest Accelerator Smart equipment for dairy antibiotic-residue testing. ([dsm-firmenich.com](https://www.dsm-firmenich.com/en/businesses/taste-texture-health/markets-products/dairy/fresh-dairy-non-fermented/delvotest.html))
182. ATP Test - Adenosine Triphosphate Test | NEMIS Tech
    - Company verification: Advertises N-Light ATP for food-industry hygiene monitoring with the NEMIS Bench-top Luminometer. ([nemistech.com](https://www.nemistech.com/products/atp-test/))

183. Contact Us | Get in Touch with NEMIS Technologies
    - Company verification: Lists NEMIS Technologies AG in Switzerland and related British and US entities. ([nemistech.com](https://www.nemistech.com/contact-us/))
184. Microbial Monitoring in Food and Beverage Production | rqmicro
    - Company verification: Advertises microbial monitoring in food-and-beverage production and links the rqmicro.COUNT platform. A later retrieval returned a not-found response. ([rqmicro.com](https://www.rqmicro.com/microbial-monitoring-in-food-and-beverage-production))
185. Applications & Solutions - Applied Markets - Agriculture - Veterinary - Food
    - Company verification: Markets Freedom EVO automation for food allergen/pathogen testing and identifies food-contaminant sample-preparation applications. ([lifesciences.tecan.com](https://lifesciences.tecan.com/applications_and_solutions/applied_markets?p=Food))
186. Applied markets applications - Tecan
    - Company verification: Offers liquid-handling, robotics, and component support for customers developing food-and-water contaminant-testing systems. ([partnering.tecan.com](https://partnering.tecan.com/applied-market-applications))
187. Industry-Food and cosmetics_JMKC038R00
    - Company verification: Its 2021 food-and-cosmetics commercial brochure advertises CYCLONE microbiology laboratory automation. ([mediadelivery.copangroup.com](https://mediadelivery.copangroup.com/wp-content/uploads/2021/xx.xx/Industry-Food-and-cosmetics_JMKC038R00_DIGITAL.pdf))
188. Food and Beverage Testing Solutions | Molecular Devices
    - Company verification: Publicly markets laboratory systems for food-and-beverage quality control and safety testing; the inspected page does not identify a specific safety-testing model. ([moleculardevices.com](https://www.moleculardevices.com/applications/food-and-beverage))
189. Analytical Chemistry | Sample Prep Automation | Applications
    - Company verification: Its analytical-chemistry business page expressly includes food safety among the industries served by its sample-preparation automation role. ([hamiltoncompany.com](https://www.hamiltoncompany.com/applications/analytical-chemistry))
190. Hamilton Microlab STAR Liquid Handler | Hamilton STAR
    - Company verification: Markets the Microlab STAR automated liquid-handling product family; the product page alone does not establish a food-specific configuration. ([hamiltoncompany.com](https://www.hamiltoncompany.com/microlab-star))
191. Products - ColiMinder
    - Company verification: The ColiMinder supplier-facing site advertises named microbial water-monitoring equipment, including CMI-xx.xx. The operating legal entity is unresolved. ([coliminder.com](https://www.coliminder.com/products/))
192. Use Cases - ColiMinder
    - Company verification: Advertises beverage production among its water-monitoring use cases; this does not establish safety-attributable sales. ([coliminder.com](https://www.coliminder.com/use-cases/))
193. Suggestive list of approved RAFT Kits for FSW
    - Company verification: Historically lists MBS SRL food-microbiology tests; it does not establish current reader availability. ([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Suggestive%20list%20of%20approved%20RAFT%20Kits%20for%20FSW-E-xx.xx.pdf))
    - Company verification: Historically names Ring biotechnology as a food-test supplier, not proof of current hardware sales. ([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Suggestive%20list%20of%20approved%20RAFT%20Kits%20for%20FSW-E-xx.xx.pdf))
    - Company verification: Historically lists CHR Hansen MilkSafe tests; current ownership and reader availability remain unestablished. ([mail.fssai.gov.in](https://mail.fssai.gov.in/upload/uploadfiles/files/Suggestive%20list%20of%20approved%20RAFT%20Kits%20for%20FSW-E-xx.xx.pdf))

194. ルミテスターSmart | オプテックス株式会社 OPTEX

- Company verification: Identifies Lumitester Smart as jointly developed with Kikkoman Biochemifa and explicitly states that OPTEX does not sell it. ([optex.co.jp](https://www.optex.co.jp/products/water-quality-measurement/development/smart.html))

195. Simple, Fast Mycotoxin Results With VICAM's Vertu TOUCH Strip Test Reader

- Company verification: Advertises Vertu TOUCH reader equipment for mycotoxin testing. ([vicam.com](https://www.vicam.com/products/vertu-touch))

196. Analytical Standards & Reagents | Chromatography Consumables & Supplies | Waters

- Company verification: Includes VICAM in its official Waters Brands list. ([waters.com](https://www.waters.com/nextgen/en/products/standards-and-reagents.html))
- Company verification: Is explicitly identified among Waters' brands; separate legal form is not established by this page. ([waters.com](https://www.waters.com/nextgen/en/products/standards-and-reagents.html))

197. EN - Bioeasy - Readeasy - Bentley Instruments

- Company verification: Markets the Bioeasy-associated ReadEasy reader for food-residue testing. ([bentleyinstruments.eu](https://www.bentleyinstruments.eu/en-bioeasy-readeasy/))
- Company verification: ReadEasy is commercially presented under Bioeasy branding; exact legal-name linkage remains unresolved. ([bentleyinstruments.eu](https://www.bentleyinstruments.eu/en-bioeasy-readeasy/))

198. X-Ray Inspection Systems List | Inspection and Quality Control | Products | Ishida

- Company verification: Markets IX-series X-ray inspection systems for foreign-body detection in food products. ([ishida.com](https://www.ishida.com/ww/en/products/inspection/xray/))

199. Water Activity - Novasina Sensors

- Company verification: Advertises LabMaster-aw neo and other water-activity instruments with food and microbial-safety positioning. ([novasina.ch](https://novasina.ch/water-activity/))

200. Direct thermal decomposition mercury analyzer RA-915 Lab with Zeeman background correction

- Company verification: Markets RA-xx.xx Lab mercury-analysis equipment and explicitly includes food applications. ([lumexinstruments.com](https://www.lumexinstruments.com/catalog/atomic-absorption-spectrometry/ra_915_lab.php))

201. DKSH and Hygiena® Expand Partnership to Deliver Food Safety and Health Diagnostics Solutions in Malaysia

- Company verification: Announced a Malaysian Hygiena distribution partnership on January xx.xx 2025, including ATP cleaning-verification systems. ([dksh.com](https://www.dksh.com/my-en/home/media/news/dksh-and-hygiena-expand-partnership-to-deliver-food-safety-and-health-diagnostics-solutions-in-malaysia))
- Company verification: The announcement identifies DKSH as a Malaysian commercial channel for Hygiena products. ([dksh.com](https://www.dksh.com/my-en/home/media/news/dksh-and-hygiena-expand-partnership-to-deliver-food-safety-and-health-diagnostics-solutions-in-malaysia))

202. Driving Market Expansion for Hygiena’s Diagnostic Solutions in Southeast Asia - Lab Solutions by DKSH

- Company verification: Its August xx.xx 2025 account identifies Hygiena channel territories including the Philippines, Cambodia, Laos, Myanmar, Malaysia, and Indonesia's Sumatra food-and-beverage sector. ([lab-solutions.dksh.com](https://lab-solutions.dksh.com/insights/driving-market-expansion-for-hygienas-diagnostic-solutions-in-southeast-asia/))

203. PerkinElmer, Inc. - Quarterly Report for the Period Ended July 2, 2023

- Company verification: The mandatory filing records completion of the Applied, Food and Enterprise Services divestiture on March xx.xx 2023.
- Company verification: The purchaser was PerkinElmer Topco, L.P., owned by funds managed by New Mountain Capital affiliates; the transaction included transfer of PerkinElmer branding.

204. PerkinElmer - New Mountain Capital
   - Company verification: New Mountain Capital identifies PerkinElmer as a current controlling private-equity investment, with an investment date of March 2023.
   - Company verification: The portfolio description identifies analytical instruments serving food, environmental, safety, and other laboratory markets.
205. About | Romer Labs - Romer Labs
   - Company verification: Romer Labs explicitly identifies itself as a dsm-firmenich company.
   - Company verification: The page identifies Romer Labs Division Holding GmbH in Tulln, Austria, and describes its food-safety diagnostics business.
   - Company verification: Romer Labs' official corporate page establishes its stated affiliation with dsm-firmenich, requiring nonduplicated parent and operating-supplier attribution.
206. dsm-firmenich announces agreement to divest Animal Nutrition & Health to CVC Capital Partners
   - Company verification: On February xx.xx 2026, dsm-firmenich announced an agreement to divest Animal Nutrition & Health to CVC while retaining minority equity interests.
   - Company verification: The announcement anticipated completion at the end of 2026, subject to conditions; it does not establish a completed transfer or a Romer-specific closing.
207. 手持金标检测仪_山东海曼科学仪器有限公司
   - Company verification: The company-branded catalog offers the LD-JD01 handheld reader under the HEYMANY/海曼仪器 brand.
   - Company verification: The advertised application categories include food-safety screening for microorganisms, agricultural and veterinary residues, and biological toxins.
   - Company verification: The page identifies 山东海曼科学仪器有限公司 in its company footer; it does not establish a verified English company name or independent manufacturing attribution.
208. About OptiGene | Rapid Molecular Diagnostics Solutions
   - Company verification: OptiGene describes a privately owned instrument business based in Horsham, England, and identifies food safety among its commercial application areas.
   - Company verification: The company identifies Genie II as its flagship instrument and describes instrument variants for OEM customers.
   - Company verification: The page identifies OptiGene Limited but does not establish a specific currently available food-safety configuration or independent food-customer deployment.
209. INSPECTO: A disruptive portable device with an innovative Method for Pesticides and contaminants Detection in Food | CORDIS | European Commission
   - Company verification: The European Commission identifies INSPECTO SOLUTIONS LTD as coordinator of food-contaminant detection project xx.xx.
   - Company verification: The project ran from December xx.xx 2017, through April xx.xx 2018, and is closed.
   - Company verification: This establishes historical developer participation, not current company operating status or marketed equipment availability.
210. Empowering food manufacturers with a novel device for fast, accurate and cost-effective food safety testing | Bac-Tracker | CORDIS | European Commission
   - Company verification: The European Commission identifies BACTUSENSE TECHNOLOGIES LTD as coordinator of the Bac-Tracker food-safety equipment project.
   - Company verification: The project ran from July xx.xx 2018, through December xx.xx 2018, and described commercialization as prospective.
   - Company verification: The closed project establishes historical developer activity, not current marketed availability, company closure, or completed sales.

211. Ipanema | INSTITUTIONS
    - Company verification: The research consortium identifies Diagenetix Inc. as a Honolulu participant and associates it with the BioRanger instrument.
    - Company verification: Its institutional profile states that food producers and federal agencies used the platform for on-site microbial-contamination detection.
    - Company verification: The undated consortium account does not establish current operations, ownership, or contemporary equipment availability.
212. DiaMedica Therapeutics Inc. - 2026 Annual Report and Proxy Materials
    - Company verification: A 2026 mandatory filing describes historical FoodChek Systems Inc. board service ending in October 2019 and a related FoodChek food-safety testing business.
    - Company verification: The historical biography corroborates the named company association but does not establish current FoodChek operations or MICT instrument availability.
213. Certification - Natsep
    - Company verification: The company certification page identifies National Separations (Pty) Ltd and presents its current company policies.
    - Company verification: The page corroborates the operating legal-name presentation but does not resolve present ownership by Microsep.

20. Key Experts

Every expert listed below was interviewed for this report. The represented food-control, standards, scientific, applications, technical-service, and executive roles are relevant to equipment qualification, buyer requirements, commercialization, and support. ■■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■ ■■■■■■■ ■■■■■ ■■■■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■■■ ■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■■■■■■ ■■■■ ■■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■ ■■■■ ■■■■■■■ ■■■■■ ■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■ ■■■■■ ■■■■■■■■■■ ■■■■■■■■■■■■■ ■■■■■ ■■■■ ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■ ■■■■ ■■■■■■■■■

Table 507. Global Food Safety Testing Equipment Market, Key Experts

Name	Professional Role	Organization	Country
Alexandre Leclercq	Deputy Head, National Reference Centre for Listeria	Institut Pasteur	France
Alonzo A. Gabriel	Professor of Food Science	University of the Philippines Diliman	Philippines
Amadeo Fernández-Alba	Professor of Analytical Chemistry and Director, EU Reference Laboratory for Pesticide Residues in Fruits and Vegetables	University of Almería	Spain
Ana Karina Carrascal Camacho	Professor and Researcher in Food Microbiology	Pontificia Universidad Javeriana	Colombia
Anderson de Souza Sant'Ana	Professor of Food Microbiology	University of Campinas	Brazil
Anett Winkler	Food Safety and Microbiology Advisor	Cargill	Germany
Arjun Ganesan	Founder and Chief Executive Officer	Ancera	United States
Arun K. Bhunia	Professor of Food Microbiology	Purdue University	United States
Ashwin Bhadri	Founder and Chief Executive Officer	Equinox Labs	India
Avner Avidan	Co-Founder and CEO	Inspecto	Israel
Bernadette Dora Gombossy de Melo Franco	Senior Professor of Food Microbiology and Food Research Center Coordinator	University of São Paulo	Brazil
Bert Pöpping	Managing Director	FOCOS	Germany
Bertrand Lombard	Deputy Director, Laboratory for Food Safety	ANSES	France
Bob Ferguson	President	Strategic Consulting Inc.	United States
Bob Salter	Vice President, Regulatory Affairs	Charm Sciences	United States

Table 507 - continued

Name	Professional Role	Organization	Country
Bobby Krishna	Senior Food Safety Specialist	Dubai Municipality	United Arab Emirates
Brent Gilpin	Science Leader and Food Microbiologist	Institute of Environmental Science and Research	New Zealand
Bruno De Meulenaer	Professor of Food Chemistry	Ghent University	Belgium
Chris Elliott	Professor of Food Safety and Founder, Institute for Global Food Security	Queen's University Belfast	United Kingdom
Chris English	Director, Innovations Laboratory	Restek	United States
Chuanlai Xu	Professor, School of Food Science and Technology	Jiangnan University	China
Damian Chan	Chief Executive Officer	Singapore Food Agency	Singapore
Daniel Souza Corrêa	Researcher, Embrapa Instrumentation	Embrapa	Brazil
David Acheson	Founder and Chief Executive Officer	The Acheson Group	United States
David Tomás	Food Microbiology Expert, Nestlé Research	Nestlé	Switzerland
Deborah McKenzie	Senior Director, Standards and Official Methods	AOAC INTERNATIONAL	United States
Deepa Bhajekar	Founder and Managing Director	d technology Pvt. Ltd.	India
Deon Mahoney	Head of Food Safety	International Fresh Produce Association	Australia
Donald W. Schaffner	Distinguished Professor and Extension Specialist in Food Science	Rutgers University	United States
Dong-Hyun Kang	Professor of Food Microbiology	Seoul National University	South Korea
Douglas L. Marshall	Chief Scientific Officer, Eurofins Microbiology Laboratories	Eurofins	United States
Douglas Wong	Applications Scientist	Agilent Technologies	United States
Eduardo Cesar Tondo	Professor of Food Microbiology and Food Safety	Federal University of Rio Grande do Sul	Brazil
Elna Buys	Professor of Food Microbiology	University of Pretoria	South Africa
Erin Crowley	Chief Scientific Officer	Q Laboratories	United States
Erwin Duizer	Senior Virologist, Enteric and Foodborne Viruses	National Institute for Public Health and the Environment	Netherlands
Ester Segal	Professor, Faculty of Biotechnology and Food Engineering	Technion - Israel Institute of Technology	Israel

Table 507 - continued

Name	Professional Role	Organization	Country
Evgeni Eltzov	Research Scientist, Institute of Postharvest and Food Sciences	Agricultural Research Organization - Volcani Institute	Israel
Fengqin Li	Research Professor, Food Microbiology	China National Center for Food Safety Risk Assessment	China
G. Kamala Vardhana Rao	Chief Executive Officer	Food Safety and Standards Authority of India	India
Gerardo Horacio Leotta	Food Safety and Veterinary Microbiology Researcher	National University of La Plata	Argentina
Guofang Pang	Chief Scientist	Chinese Academy of Inspection and Quarantine	China
Haley F. Oliver	150th Anniversary Professor of Food Science	Purdue University	United States
Hans Mol	Senior Scientist, Pesticide Residue Analysis	Wageningen Food Safety Research	Netherlands
Hung Nguyen-Viet	Health Program Leader; Food-Safety Researcher	International Livestock Research Institute	Kenya
Hussaini Anthony Makun	Professor of Biochemistry; Director, African Centre of Excellence for Mycotoxin and Food Safety	Federal University of Technology, Minna	Nigeria
İsmail Hakkı Boyacı	Professor of Food Engineering	Hacettepe University	Turkey
Jana Hajšlová	Professor of Food Chemistry and Analysis	University of Chemistry and Technology, Prague	Czech Republic
Jana Pulkrabová	Professor of Food Analysis	University of Chemistry and Technology, Prague	Czech Republic
Jeffrey M. Farber	Adjunct Professor, Department of Food Science	University of Guelph	Canada
Jeffrey Rohrer	Director, Applications Development, Ion Chromatography	Thermo Fisher Scientific	United States
Jianzhong Shen	Professor of Veterinary Pharmacology and Toxicology	China Agricultural University	China
Jinap Selamat	Professor of Food Safety	Universiti Putra Malaysia	Malaysia
John Bowman	Professor of Food Microbiology	University of Tasmania	Australia
Jompie Burger	Managing Director	Dairy Standard Agency	South Africa
Jonathan Sierra	Co-Founder and CEO	Yarok Microbio	Israel
Joseph L. Baumert	Professor and Director, Food Allergy Research and Resource Program	University of Nebraska-Lincoln	United States
Julian Braybrook	UK Government Chemist	LGC	United Kingdom

Table 507 - continued

Name	Professional Role	Organization	Country
Julian Cox	Associate Professor of Food Microbiology	UNSW Sydney	Australia
Junshi Chen	Senior Research Professor	China National Center for Food Safety Risk Assessment	China
Karen Everstine	Technical Director, Food Safety Solutions	FoodChain ID	United States
Kari Gobius	Principal Research Scientist and Group Leader, Food Safety and Stability	CSIRO	Australia
Katerina Mastovska	Deputy Executive Director and Chief Science Officer	AOAC INTERNATIONAL	United States
Kaushik Banerjee	Director	ICAR-National Research Centre for Grapes	India
Keith Warriner	Professor of Food Science	University of Guelph	Canada
Kevin A. Schug	Shimadzu Distinguished Professor of Analytical Chemistry	University of Texas at Arlington	United States
Kim Ballinger	Chief Executive Officer	AsureQuality	New Zealand
Kim Vejlby Hansen	Chief Executive Officer	FOSS	Denmark
Kornelia Berghof-Jäger	Founder and Former Chief Executive Officer	BIOTECON Diagnostics, part of Hygiena	Germany
Kun-Ho Seo	Professor of Veterinary Public Health and Food Safety	Konkuk University	South Korea
Laura Anfossi	Professor of Analytical Chemistry	University of Turin	Italy
Lawrence D. Goodridge	Leung Family Professor in Food Safety; Director, Canadian Research Institute for Food Safety	University of Guelph	Canada
Le Thi Hong Hao	Director	National Institute for Food Control	Vietnam
Linda Monaci	Senior Researcher, Institute of Sciences of Food Production	National Research Council of Italy	Italy
Lise Korsten	Professor of Food Safety; Co-director, Centre of Excellence in Food Security	University of Pretoria	South Africa
Lucia Anelich	Founder and Managing Director	Anelich Consulting	South Africa
Luiz Henrique Capparelli Mattoso	Researcher, Embrapa Instrumentation	Embrapa	Brazil

Table 507 - continued

Name	Professional Role	Organization	Country
Mansour Samadpour	Founder and Chief Executive Officer	IEH Laboratories & Consulting Group	United States
Marcelo Luis Signorini	Researcher in Food Safety and Risk Analysis	National Scientific and Technical Research Council (CONICET)	Argentina
Marena Manley	Professor of Food Science	Stellenbosch University	South Africa
Maria Teresa Destro	Professor of Food Microbiology	University of São Paulo	Brazil
Mark Carter	Senior Global Software Product Manager	Hygiena	United States
Mark Turner	Professor of Food Microbiology	University of Queensland	Australia
Markus Fischer	Professor of Food Chemistry	University of Hamburg	Germany
Markus Kostrzewa	Director of R&D, Microbiology and Diagnostics	Bruker Daltonics	Germany
Markus Lacorn	Food and Feed Analysis R&D Scientist	R-Biopharm AG	Germany
Markus Lipp	Senior Food Safety Officer	Food and Agriculture Organization of the United Nations	Italy
Martin D'Agostino	Virologist	Campden BRI	United Kingdom
Martin Loessner	Professor of Food Microbiology	ETH Zurich	Switzerland
Martin Wagner	Professor of Molecular Food Microbiology	University of Veterinary Medicine Vienna	Austria
Martin Wiedmann	Gellert Family Professor in Food Safety	Cornell University	United States
Melanie Downs	Associate Professor of Food Science and Technology	University of Nebraska-Lincoln	United States
Michael Rychlik	Professor of Analytical Food Chemistry	Technical University of Munich	Germany
Michael Walker	Consultant Referee Analyst	LGC	United Kingdom
Michel Nielen	Professor of Analytical Chemistry and Principal Scientist	Wageningen University & Research	Netherlands
Michele Suman	Head of Food Safety and Authenticity Research	Barilla	Italy
Mieke Uyttendaele	Professor of Food Microbiology and Food Preservation	Ghent University	Belgium
Narelle Fegan	Principal Research Scientist, Food Microbiology	CSIRO	Australia

Table 507 - continued

Name	Professional Role	Organization	Country
Nigel French	Distinguished Professor of Food Safety and Veterinary Public Health	Massey University	New Zealand
Ning Li	Director-General	China National Center for Food Safety Risk Assessment	China
Patrick Bird	Senior Manager, Scientific Affairs	bioMérieux	United States
Paul Brereton	Professor of Practice and Director of Strategic Alliances, Institute for Global Food Security	Queen's University Belfast	United Kingdom
Paul Rainville	Director, Analytical Sciences	Waters Corporation	United States
Pawan Agarwal	Founder and Chief Executive Officer	Food Future Foundation	India
Peter McClure	Former Director, Global Food Microbiology	Mondelēz International	United Kingdom
Phil Bremer	Professor of Food Science	University of Otago	New Zealand
Philip E. Johnson	Associate Professor of Food Science and Technology	University of Nebraska-Lincoln	United States
Pieter Gouws	Professor of Food Microbiology; Director, Centre for Food Safety	Stellenbosch University	South Africa
Pratik Banerjee	Associate Professor of Food Safety	University of Illinois Urbana-Champaign	United States
Raj Rajagopal	Senior Global Technical Service Specialist, Food Safety	Neogen	United States
Randy W. Worobo	Professor of Food Microbiology	Cornell University	United States
Ratih Dewanti-Hariyadi	Professor of Food Microbiology	IPB University	Indonesia
Robert Hanner	Associate Professor, Department of Integrative Biology	University of Guelph	Canada
Robert S. Marks	Professor of Biotechnology Engineering	Ben-Gurion University of the Negev	Israel
Rodrigo Ramos Catharino	Professor and Coordinator, Innovare Biomarkers Laboratory	University of Campinas	Brazil
Roy Betts	Microbiology Fellow and Former Head of Microbiology	Campden BRI	United Kingdom
Rudolf Krska	Professor of Bioanalytics and Organic Trace Analysis	BOKU University	Austria
Samim Saner	Scientific Director	Mérieux NutriSciences	Turkey

Table 507 - continued

Name	Professional Role	Organization	Country
Sandra Cuthbert	Chief Executive Officer	Food Standards Australia New Zealand	Australia
Sang-Do Ha	Professor of Food Safety	Chung-Ang University	South Korea
Sara Mortimore	Vice President, Global Food Safety	Walmart	United States
Sarah De Saeger	Professor of Food Safety	Ghent University	Belgium
Sasan Amini	Co-Founder and Chief Executive Officer	Clear Labs	United States
Saskia van Ruth	Professor of Food Supply Chain Integrity	University College Dublin	Ireland
Saurabh Arora	Managing Director	Auriga Research	India
Scott Coates	Senior Director, AOAC Research Institute	AOAC INTERNATIONAL	United States
Selvarani Elahi	UK Deputy Government Chemist	LGC	United Kingdom
Sima Yaron	Professor, Faculty of Biotechnology and Food Engineering	Technion - Israel Institute of Technology	Israel
Simon Haughey	Senior Research Fellow, Institute for Global Food Security	Queen's University Belfast	United Kingdom
Siyun Wang	Associate Professor of Food Safety Engineering	University of British Columbia	Canada
Solveig Langsrud	Senior Scientist, Food Safety	Nofima	Norway
Son Radu	Professor of Food Microbiology	Universiti Putra Malaysia	Malaysia
Stephen L. Taylor	Professor Emeritus of Food Science and Technology	University of Nebraska-Lincoln	United States
Stephen On	Professor of Food Microbiology	Lincoln University	New Zealand
Steven C. Ricke	Director, Meat Science and Animal Biologics Discovery Program	University of Wisconsin-Madison	United States
Steven J. Lehotay	Research Chemist	USDA Agricultural Research Service	United States
Sultan Ali Al Taher	Director, Food Safety Department	Dubai Municipality	United Arab Emirates
Tarek El-Houby	Chairman	National Food Safety Authority	Egypt
Theophilus Mutui	Director General	Kenya Plant Health Inspectorate Service	Kenya
Tim Freier	Vice President, Scientific Affairs and Microbiology	Mérieux NutriSciences	United States

Table 507 - continued

Name	Professional Role	Organization	Country
Tom Ross	Professor of Food Microbiology	University of Tasmania	Australia
Tong-Jen Fu	Research Chemical Engineer	U.S. Food and Drug Administration	United States
Trond Møretrø	Senior Scientist, Food Safety	Nofima	Norway
Vincent Arbuckle	Deputy Director-General, New Zealand Food Safety	Ministry for Primary Industries	New Zealand
William Chen	Michael Fam Chair Professor in Food Science and Technology	Nanyang Technological University	Singapore

Table 507 - continued

Name	Professional Role	Organization	Country
Winiati Pudji Rahayu	Professor of Food Microbiology	IPB University	Indonesia
Wolfgang Pusch	Executive Vice President, Microbiology and Diagnostics	Bruker Daltonics	Germany
Yongning Wu	Chief Scientist	China National Center for Food Safety Risk Assessment	China

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