

U.S. Filter Integrity Test Market Size, Share & Trends Analysis Report By Test Method (Forward Flow (Diffusion) Test, Bubble Point Test, Pressure Hold Test, Water Intrusion Test), By Mode, By Type, By End-use, And Segment Forecasts, 2025 - 2033

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Abstracts

U.S. Filter Integrity Test Market Size & Trends

The U.S. filter integrity test market size was estimated at USD 32.12 million in 2024 and is projected to reach USD 47.36 million by 2033, growing at a CAGR of 4.44% from 2025 to 2023. The market is primarily driven by the rapid growth of the biopharmaceutical industry. Increasing demand for biologics, monoclonal antibodies, and advanced therapies has heightened reliance on sterile filtration processes, where integrity testing is essential for maintaining product quality and regulatory compliance. With strict FDA oversight and sterility assurance requirements across every stage of biologics production, companies are making significant investments in advanced manufacturing facilities and filtration systems, creating strong demand for integrity testing solutions nationwide.

A recent example underscores this trend. In April 2025, UCB, a biopharmaceutical company committed to treating severe diseases, announced plans to establish a new, state-of-the-art biologics manufacturing facility in the U.S. This expansion highlights the growing biomanufacturing footprint in the country and underscores the importance of U.S. filter integrity testing systems to support compliance and ensure product safety. As more organizations invest in biologics capacity and cutting-edge production capabilities, demand for FIT solutions is expected to rise further.

The market is also being propelled by technological innovation and evolving regulatory

expectations. As the U.S. strengthens its position as a leader in biologics, vaccines, and cell and gene therapies, integrity testing-particularly Pre-Use Post-Sterilization Integrity Testing (PUPSIT)-is gaining traction as a critical quality measure. These tests help manufacturers meet global standards while minimizing contamination risks and avoiding costly recalls. The integration of automated testing solutions into Good Manufacturing Practice (GMP) environments further ensures efficiency, compliance, and reliability.

For instance, in May 2025, Parker Bioscience Filtration, a division of Parker Hannifin, launched the SciLog NFF+ PF, a compact, multipurpose normal flow filtration system equipped with onboard PUPSIT functionality. By addressing the complexities of PUPSIT-such as reducing manual handling, operator errors, and product waste-this system supports safer and more streamlined biopharmaceutical production. Such innovations are setting new industry benchmarks, positioning the U.S. FIT market for sustained growth in the years ahead.

U.S. Filter Integrity Test Market Report Segmentation

This report forecasts revenue growth and provides an analysis on the latest trends in each of the sub-segments from 2021 to 2033. For this report, Grand View Research has segmented the U.S. filter integrity test market report based on test method, mode, type, and end-use:

Test Method Outlook (Revenue, USD Million, 2021 - 2033)

Forward Flow (Diffusion) Test

Bubble Point Test

Pressure Hold Test

Water Intrusion Test

Others

Mode Outlook (Revenue, USD Million, 2021 - 2033)

Automated

Manual

Type Outlook (Revenue, USD Million, 2021 - 2033)

Liquid Filter Integrity Test

Air Filter Integrity Test

End-use Outlook (Revenue, USD Million, 2021 - 2033)

Biopharmaceutical & Pharmaceutical Industry

Food & Beverage Industry

Others

This report can be delivered to the clients within 3 Business Days

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