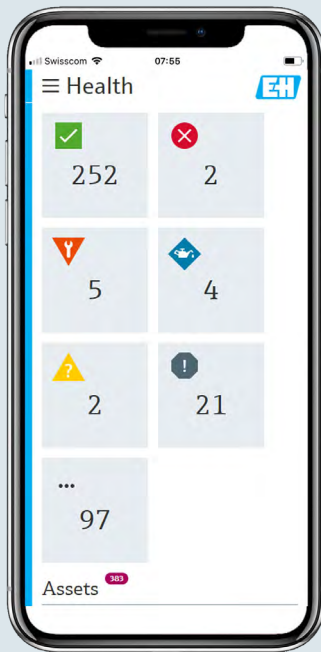


Reduce downtime with Endress+Hauser's consultative approach



Benefits at a glance

- Reduced downtime
- Improved asset management
- Proactive maintenance
- Automated inventory management
- Expert technical support
- Scalable solutions
- Enhanced operational efficiency

Endress+Hauser's consultative approach – the heart of scalable calibration, diagnostics and support solutions

Unplanned downtime

- Limited digital records
- Inefficient technical resources
- Strict quality standards across production lines
- Inefficient asset management

↓
Endress+Hauser's
consultative
approach

Overcoming immediate challenges and realizing long-term goals

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Real-time condition monitoring
Centralized documentation
Historical performance tracking
Calibration program
Technical support
Spare parts vending

Reduced downtime

- Improved asset management
- Proactive maintenance
- Automated inventory management
- Scalable solutions
- Enhanced operational efficiency



Summary Unplanned downtime can cost manufacturers millions annually. For one U.S.-based bottling company, minimizing downtime while maintaining high product quality and meeting federal regulations is essential to securing and retaining bottling contracts. Through a consultative approach, Endress+Hauser helped the company implement scalable solutions that improved operational efficiency, standardized maintenance practices and enhanced device asset management visibility.

Challenge The company faced three critical challenges concerning its nationwide operations:

Challenge 1: Downtime was driven by fragmented digital records, limited technical support and reactive maintenance practices. This challenge hindered the company's ability to respond quickly to compliance audits and equipment failures, thus impacting the final product output potential.

Challenge 2: Maintaining strict quality standards across all production lines requires consistent, traceable

processes. Failure to meet regulatory expectations, such as those from the FDA and state process authorities, can result in penalties, fines and loss of business contracts.

Challenge 3: The company lacked visibility into the condition and performance of critical devices, relying on time-based maintenance rather than real-time diagnostics. This made it challenging to proactively manage equipment across multiple sites. In addition, scarce resources were used due to unnecessary maintenance.

A strategic, customer-focused approach was needed to address both immediate operational challenges and long-term reliability goals.

Solution The engagement began with a series of workshops and interviews involving corporate leadership, plant managers and Endress+Hauser experts. The main solution, Endress+Hauser's consultative approach, uncovered the company's specific needs and aligned subsequent solutions with the company's operational priorities.

Solution 1: A unified calibration strategy was deployed across all aseptic production sites.

This included:

- Consistent KPIs and digital reporting accessible at both local and corporate levels
- Contractual alignment of calibration downtime within preventive maintenance windows

Solution 2: The site now uses diagnostic information from smart instrumentation more holistically to shift from time-based maintenance activities to condition-based maintenance. Several tools from Endress+Hauser enable better use of this diagnostic information:

- Netilion Health (real-time device condition monitoring)
- Netilion Library (centralized documentation)
- Netilion Value (historical performance tracking)
- Smart Support (technical support with 24/7 access to device-level troubleshooting information)

Solution 3: Based on the assessment of the customer's installed base, Endress+Hauser consultants worked in collaboration with the company to offer a dynamic solution for critical spare parts management. Five pilot sites were selected to validate and refine the solution before broader rollout, ensuring scalability and alignment with business goals.

Results The consultative approach became the cornerstone of the project's success by prioritizing a deep understanding of the bottling company's needs and aligning tailored solutions, which led to the following results:

Result 1: The Netilion platform continuously monitors

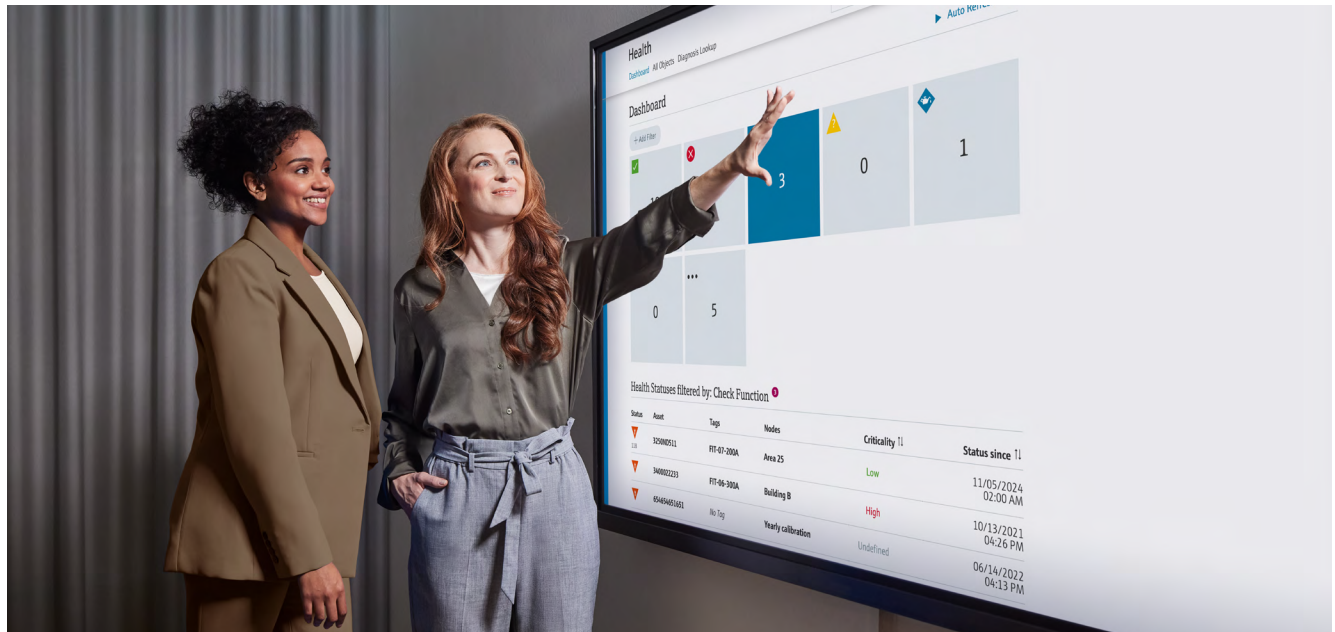
instrumentation and clearly indicates which instrumentation requires service. Previously, these challenges may have been unknown until operators noticed a process challenge or when the final product was tested and determined not to meet the necessary quality requirements.

Result 2: Netilion platform for digital recordkeeping maintains lines of sight to meet regulatory guidelines, such as those governed by the FDA. Instrumentation is calibrated appropriately, and records of the event are automatically attached to the instrument through business systems. This means regulatory compliance is seamlessly available to the customer.

Result 3: Standardized calibration program information is now maintained

by the site in Endress+Hauser's Netilion platform with defined KPIs to improve records visibility so that maintenance teams can be more responsive.

Through a consultative approach, the bottling company was able to optimize the value of being an Endress+Hauser partner. With scalable digital tools, real-time diagnostics and always-available technical knowledge, Endress+Hauser continues to help customers stay ahead in a competitive industry. The result is a more agile, compliant and efficient operation better prepared to secure and retain critical bottling contracts.



Key products used

Netilion platform: Cloud-based IIoT ecosystem was used for local and global monitoring of assets, providing accessible reports and real-time diagnostics.

Dynamic Installed Base Analysis (DIBA): DIBA program involves a thorough analysis of the installed base. Over several days, the Endress+Hauser team, alongside site technicians, collects and organizes data on hundreds of devices.



Learn more about Endress+Hauser's Netilion platform



Learn more about Endress+Hauser's Dynamic Installed Base Analysis service



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