

Performance meets hygienic industry requirements: The new compact product line for level and pressure measurement

Endress+Hauser is developing a new compact product line for hygienic applications. The development focuses on the requirements of the industry. Consisting of three measuring principles for measuring pressure, continuous levels and point levels, the new products can be used in many processes in the food and beverage sector. In this interview, portfolio and industry managers from Endress+Hauser explain how a small size and highest performance can be combined without compromise.

How does Endress+Hauser know and understand the needs of customers in the Food & Beverage industry?

Tim Schrodt, Industry Manager, Food:

Endress+Hauser has been a reliable partner in the food industry for many decades and is the market leader in several regions of the world. We know our customers' needs, which makes us the measuring device manufacturer with the largest number of EHEDG-certified measuring devices and a reliable supplier for large-scale projects. With our expertise and knowledge, we know our customers need easily commissioned and operated devices. For this very reason, the operating menu of our new product line is also easy to use across all measuring principles. We offer our customers tried-and-tested technology that delivers accurate measured values with all the necessary industry approvals.

The new product line is designed to make a difference in terms of performance. What does 'performance' mean to Endress+Hauser?

Philipp Walser, Portfolio Manager:

At Endress+Hauser, we believe performance to be an overall package. This includes more than just measurement performance. Of course, this also plays an important role, but the overall package also includes important industry aspects such as ease of use, versatile digital connectivity, hygienic design and the provision of data for process optimization and predictive maintenance.

Why was ease of use a goal when developing the device?

Tim Schrodt, Industry Manager, Food:

In the food industry, measurement technology is an important part of the process. However, it is not the core activity of process operators. They need reliable measured values, but don't want to deal with time-consuming commissioning of measuring devices or their complex operation. To ensure our customers can always concentrate on their core competence, we have focused on simplicity in the new product line. Operating wizards intuitively guide you through the most important steps and make using the devices easier than ever before. Process supervisors can conveniently control the measuring devices via Bluetooth technology, HART or IO-Link thanks to the versatile digital connectivity, Heartbeat monitoring provides our customers with important insights into the process.

Anomalies such as foam or build-up are detected by the device. This helps with process optimization and predictive maintenance.

What role does hygienic design play for users in the industry?

Tim Schrodtt, Industry Manager, Food:

Hygiene is the industry's most important factor. Cleanability and conformity of food contact materials are key criteria in food production. For this reason, the new product line was developed and certified in a hygienic design in accordance with EHEDG and 3-A guidelines.

Achieving exceptional performance requires good measurement performance. What does the new product line offer in this context?

Philipp Walser, Portfolio Manager:

The measurement performance of the new compact product line is at an outstanding level. Despite the small size, we didn't have to make any compromises. With the radar level measuring device, Micropilot FMR43, we can even measure in the smallest containers and cover measuring ranges of up to 15 meters. With this device, we attain faster measuring speeds than ever before, making it possible to achieve maximum accuracy even in media with turbulent surfaces. The cross-technological integrated Heartbeat Technology provides diagnostics, verifies performance and monitors all process data for predictive maintenance and process optimization strategies. This technology is particularly beneficial for radar measuring devices. With Heartbeat Monitoring, for example, foam can be detected on the medium and anti-foam agents can be used on-demand, leading to cost savings. With Heartbeat Technology and the Radar Accuracy Index (RAI), traceable verification in accordance with DIN ISO 9001 is possible. This is the basis for extending calibration cycles and reducing documentation costs. Verification is carried out on demand, in less than 3 minutes without dismantling or process interruption and with automatic documentation.

Explain the advantages of the compact size.

Tim Schrodtt, Industry Manager, Food:

Our devices, which are just the size of a smartphone, are ideal for various applications in the food industry. Narrow installation situations, such as those often found in skids for milk and beverage processing, are no longer a challenge. The scalability of processes from laboratory to pilot plant to production scale is also a real added value for our customers. In addition, high frequencies in radar technology enable particularly small process connections, which are typically found in small tanks.

The new product line also includes radar measuring devices with different frequencies. Why is this necessary?

Philipp Walser, Portfolio Manager:

In level measurement technology, the trend is towards measurement with radar measuring devices. The technology has many advantages. For us at Endress+Hauser, it is important to meet the customer's needs in the best possible way. In addition to the proven 80 GHz frequency, the new compact radar measuring devices have a sensor variant with a frequency of 180 GHz. This innovative technology is especially suitable for particularly small tanks or containers with rapidly changing levels. It is important to us to offer our customers a tailor-made solution. For this reason, the new series will be available with two different frequencies.

The new range of measuring devices has been developed to meet the needs of the industry. Can you give examples that illustrate this?

Tim Schrodtt, Industry Manager, Food:

Anyone who is familiar with the food industry knows how important it is to maintain a hygienic process environment. That's why we not only designed the devices hygienically in the process-contact area, but also the housing. The absence of gaps and resistance to external cleaning were important criteria here. The IP69 protection of our devices is exemplary proof of this. Sterilization-in-place (SIP) processes are also essential for the food industry. With the new measuring sensors for pressure, point level and continuous level, tanks can easily be cleaned from the inside at 150°C without removing the measuring devices.



EH_compact_product_line.jpg

Compact design, full performance. Endress+Hauser boasts a new product line for continuous level, point level and pressure measurement in hygienic applications.

The Endress+Hauser Group

Endress+Hauser is a global leader in measurement and automation technology for process and laboratory applications. The family company, headquartered in Reinach, Switzerland, achieved net sales of more than 3.7 billion euros in 2023 with a total workforce of almost 17,000.

Endress+Hauser devices, solutions and services are at home in many industries. Customers thus use them to gain valuable knowledge from their applications. This enables them to improve their products, work economically and at the same time protect people and the environment.

Endress+Hauser is a reliable partner worldwide. Its own sales companies in more than 50 countries as well as representatives in another 70 countries ensure competent support. Production facilities on four continents manufacture quickly and flexibly to the highest quality standards.

Endress+Hauser was founded in 1953 by Georg H Endress and Ludwig Hauser. Ever since, the company has been pushing ahead with the development and use of innovative technologies, now helping to shape the industry's digital transformation. 8,900 patents and applications protect the Group's intellectual property.

For further information, please visit www.endress.com/media-center or www.endress.com

Contact

Martin Raab
Group Media Spokesperson
Endress+Hauser AG
Kägenstrasse 2
4153 Reinach BL
Switzerland

Email martin.raab@endress.com
Phone +41 61 715 7722
Fax +41 61 715 2888