# #empowerthefield: The Industry 4.0 program from Endress+Hauser

## Experience measurement instrumentation, digital solutions and services for the chemical and life sciences industries at ACHEMA 2022

Plant downtime and unplanned maintenance activities are major challenges in the chemical industry. Connecting field instruments unleashes enormous potential to improve plant performance. #empowerthefield, the Industry 4.0 program from Endress+Hauser, raises digitalization projects to a new level. During the 2022 ACHEMA trade fair – exhibit booth C27/hall 11.1 – visitors can discover various highlights, solutions packages and services, plus meet with Endress+Hauser process automation experts. They can also learn more about #empowerthefield as well as products and solutions in the field of advanced analytics or test and verification concepts.

“As a technology leader in plant and process automation with seven decades of experience, we work together with our customers and technology partners to tap into the new value chain opportunities that Industry 4.0 affords. We help customers utilize their process and instrument data in order to improve the availability, reliability and efficiency of their plants,” says Matthias Altendorf, CEO of the Endress+Hauser Group.

**A path to digitalization for plant operators**Intelligent measurement instruments collect considerable amounts of data at the field level. Nevertheless, 97 percent of this information remains unused, although it serves as the raw data for Industry 4.0.

#empowerthefield, the Industry 4.0 program from Endress+Hauser, ensures that plant operators can exploit the potential of this data. The Netilion cloud-based ecosystem provides a simple way for operators to initiate their digitalization projects. Field-proven solutions packages create a digital twin of the installed base and make it remotely available. Users monitor the condition of the instruments with Netilion, making predictive maintenance possible, thus leading to process optimization, increased plant availability and reduced costs.

**From the lab to the process**At ACHEMA, Endress+Hauser will be presenting new optical methods for the inline measurement of quality parameters. “In the future, we want to be able to support our customers along the entire chain, from R&D and product and process development to production and quality control,” explains Mr Altendorf. With the new optical analysis instruments, the same instruments and technologies can be employed from the lab to process, thus providing comparable measurement values.

The laser analysis technology from Endress+Hauser, based on Raman spectroscopy, supplies precise analysis data in real time regarding the chemical composition of the media. The Raman analysis instruments and probes for the chemical and life sciences industries are optimized for solids, liquids and gases. A global network of highly qualified service technicians is responsible for the maintenance, technical support and performance optimization of the Raman analysis systems.

**Keeping a finger on the pulse of measurements**Intelligent sensors that carry out self-monitoring around the clock – this is what Heartbeat Technology, the trend-setting diagnostic and verification concept from Endress+Hauser, has to offer. Integrated diagnostic, verification and monitoring functions supply comprehensive sensor and process data, thus enabling standardized diagnostic notifications with clear instructions on what measures to take. Predictive maintenance is thus possible with little effort. Thanks to Heartbeat Technology, plant operators can drive their maintenance costs down to a minimum.

**Highlights for the chemical industry**Experience measurement technology first-hand. Endress+Hauser will be presenting numerous highlights from the product portfolio, such as the latest generation of level instruments from the Micropilot family for liquids and bulk solids. Thanks to the use of optimized analysis algorithms, these 80 GHz radar sensors supply reliable measurement results, without signal loss, even at difficult-to-access measuring points, in dusty environments or with extreme process temperatures.

More Industry 4.0. More productivity. More process reliability. With the Cerabar and Deltabar pressure and differential transmitters, users can take a relaxed look into the future. The recently introduced high-end instruments are perfectly designed for charting a path to Industry 4.0. Heartbeat Technology provides documented verification and creates a basis for predictive maintenance.

**Memosens 2.0 – simple, reliable, connected**The new Memosens 2.0 generation of sensors allows customers in the chemical and life sciences industries to reach the next level of liquid analysis. Memosens liquid analysis technology has already proven itself millions of times with features such as digitalization of the measurement values directly in the sensor head, contactless digital signal transmission and the diagnosis and storage of all relevant data directly in the sensor. Memosens 2.0 now fulfills the requirements of Industry 4.0 as well. Additional process and diagnostic data supply precise information regarding the current condition of the sensor and future maintenance needs.

**Highlights for the life sciences industry**  
One of the top priorities of the life sciences industry is ensuring a high level of product quality while at the same time adhering to stringent government regulations. The key lies in the calibration of measurement instruments. Endress+Hauser will introduce its ISO 17025 accredited calibration service at ACHEMA 2022. The company tests, calibrates and adjusts instruments from all manufacturers, either in the lab or directly in the plant. Endress+Hauser calculates the optimal calibration interval for users and in the process helps them to optimize the cost–risk ratio.

Endress+Hauser will also introduce the iTHERM TrustSens self-calibrating temperature sensor at the ACHEMA trade fair. This instrument enables seamless and traceable monitoring thanks to a completely automated inline self-calibration function while the process is running. This one-of-a-kind sensor technology represents a milestone in temperature measurement technology and offers added value, especially for customers who require seamless monitoring of sterilization processes.

**Visit Endress+Hauser during ACHEMA**Those interested in learning about Endress+Hauser’s technologies during ACHEMA in Frankfurt are cordially invited to visit us at exhibit booth C27 in hall 11.1. The Endress+Hauser employees look forward to meeting and talking with you.

  
**empowerthefield.jpg**  
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**Heartbeat Technology.jpg**  
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**Heartbeat\_Technology\_Logo.jpg**Heartbeat Technology: integrated diagnostic, verification and monitoring functions supply comprehensive sensor and process data, thus enabling standardized diagnostic notifications with clear instructions on what measures to take.

  
**H21\_0571.jpg**  
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**CerabarDeltabar.jpg**  
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**EH\_Memosens\_1.jpg**  
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**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 approximately 2.9 billion euros in 2021 with a total workforce of more than 15,000.

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. 8,600 patents and applications protect the Group’s intellectual property.

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

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