

# Case Study Endress+Hauser Mess- technik GmbH Co. KG / Wander AG

Internationale Fachmesse  
für industrielle Instandhaltung

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M,O,C,  
Messe München GmbH  
Lilienthalallee 40  
81823 München  
Germany

Telefon (+49 89) 3 23 53-189  
Telefax (+49 89) 3 23 53-197  
info@maintain-europe.com  
www.maintain-europe.com



## Concept for In-place Calibration Increases Plant Availability

### Categories

1. Maintenance management
2. Measuring and monitoring technology

### Market Sector

Food Processing Industry

### Brief Description

- Survey of installed measuring and monitoring technology, analysis and consequent deduction of maintenance processes to be implemented
- Set up of mobile calibration facilities and detailed scheduling with regard to production control and maintenance procedures
- In-place calibration with a mobile calibration module in accordance with standard operating procedures (SOP)
- Compilation of measuring-point records in accordance with ISO/IEC 17025
- Adjusting and recalibration of measuring and monitoring equipment

### Task

Development of maintenance and quality assurance concepts for upcoming flow monitoring technology audits. Safeguarding documentation and traceability for verification of technical status and operating efficiency checks. Taking over all year-on-year calibration works for an initial period of three years by the contractor and execution of all works by using referential equipment for feedback purposes in accordance with SOP.

### Preliminary Events and Preparation

At first all installed measuring and monitoring devices were audited. This survey comprised important application and processing data as well as relevant information on maintenance and auditing documents. The analysis assessed the importance of monitoring during the production process and was stipulated in close cooperation with the client.

### Implementation

*Raw materials and their processing at Wander AG are subject to rigid quality standards in accordance with ISO 9000/HACCP and stiff conditions imposed the British Retail Consortium. To keep up with these standards and for quality assurance purposes Wander AG has committed itself to secure an even higher grade of efficiency and safety during production. Maintenance is of critical importance to secure these goals. After completing an evaluation of different providers, Wander AG decided to commission **Endress+Hauser Messtechnik GmbH & Co. KG:***

During the development of the quality assurance and maintenance concept for upcoming flow monitoring technology audits in-situ, Endress+Hauser focussed on safeguarding the documentation and traceability for verification of technical status and for keeping in line with cost-efficiency targets.

Flow measuring equipment may influence the quality of products directly. Therefore it is vital for the automatic dosage of liquid raw materials to be reliable at any time. To be able to document the quality of measurements during auditing processes it is necessary to guaranty in-place calibration directly at the line of production in accordance with the requirements by the ordering party.



**Endress + Hauser's monitoring technology at Wander AG**

As there is no equipment for in-place calibration of flow measuring equipment Endress+Hauser technicians have been assigned to calibrate the equipment at the Wander production lines throughout the three-year contract term.

This is done in the following way: a specialist of Endress+Hauser is employed to set up the mobile calibration equipment in accordance with technical requirements and time schedule of the production process and maintenance needs.

Subject to SOP the following process is implemented: all data from the master flow measuring device is racked up and compared to process data received from the respective area of operations. A report is generated in accordance with the measured calibration points with regard to ISO/IEC 17025.

Should by any chance a deviation from the process relevant reference value happen, a new calibration is implemented after consulting the customer. After this corrective action a second calibration report is generated to document the measuring point without creating a gap.

The senior production manager at Wander AG confirms the advantages of Endress+Hauser's system: "We do not only want to measure the flow as such, but also want to know if the monitoring device used at the measuring points along the production lines delivers the right data. This really helps us. At the same time it calibrates the complete measuring line up to the process main control system. Finally, one should always decide upon the time and place to use one's own staff or which services one should let external providers do. This is the reason why we decided to use the services offered by Endress+Hauser for in-place calibrations. We needed specialists, for our own staff was much too involved in daily business for being able to deal with these problems in a satisfactorily way."

#### **Customer's Benefit**

- Compliance with ingredients' requirements during dosage by precession recipe processing and optimal use of raw materials
- Adherence to delivery schedules by enhanced plant availability
- Disburdening staff of the ordering party

**Ordering Party**

**Wander AG**, founded in 1865, since 2002 a subsidiary of Associated British Foods (ABF), one of the largest international food processing enterprises in Europe with a yearly turnover of £ 5.6 billion. Wander AG is based in Neuenegg, Switzerland. It produces and markets renown food brands such as Ovomaltine®, Caotina®, Twinings®, Dawa®, Jemalt® and Isostar®.

Internet: <http://www.wander.ch>

**Contractor**

**Endress+Hauser Messtechnik GmbH & Co. KG**, founded in 1953 and wholly owned by the Endress family since 1975, is an internationally leading supplier of measuring and monitoring instruments and automation solutions for the industrial process engineering industry. In 2005 the Endress+Hauser Group employed a staff of 6.719 and posted sales of € 885,5 million. 76 companies in 37 countries are controlled by a holding company in Reinach/Switzerland. E+H offers a far range of instruments, components, engineering services, operation services, measurement and control solutions. This includes designs for products for safety-related applications like sensors and measurement devices to determine pressures, temperatures, flows, levels, and forward this information to sophisticated control technology. In refineries, gas production facilities, pharmaceutical and chemical plants, pulp manufacturing, breweries and large water treatment facilities all around the world, E+H is supporting its customers with custom-made process automation solutions. In 2005 8,4 per cent of E+H sales went into R&D. In the same year E+H filed 173 new products for patents.

Internet: <http://www.de.endress.com>

**Contact:** Thomas Kaufmann, Marketing Manager Services  
Endress+Hauser Messtechnik GmbH+Co. KG, Colmarer Strasse 6,  
D-79576 Weil am Rhein, Germany  
Tel.: (+49 7621) 975907  
Fax: (+49 7621) 97520907  
E-mail: [thomas.kaufmann@de.endress.com](mailto:thomas.kaufmann@de.endress.com)

**Maintain 2007**

The 3<sup>rd</sup> International Trade Fair for Industrial Maintenance will be staged from October 16<sup>th</sup> to 18<sup>th</sup> 2007 at the M,O,C, trade fair centre in Munich. As MAINTAIN is the only specialized international trade fair for industrial maintenance in the world, it gives visitors a look at the latest trends in all sectors and furnishes them with information about state-of-the-art solutions that can be used to repair, maintain, inspect and improve their production facilities. For decision-makers and experts, that makes it the most important business gathering that deals with all aspects of industrial maintenance. Special fora on maintenance as a core factor for production and up-to-date information on MAINTAIN's web pages add to the event itself.

**Contact:** Sonja Kreitmeier, Public Relations Manager Maintain  
Messe München GmbH, Messsegelaende, 81823 Munich, Germany  
Tel.: (+49 89) 949-20717, Fax: (+49 89) 949-9720717  
E-mail: [sonja.kreitmeier@messe-muenchen.de](mailto:sonja.kreitmeier@messe-muenchen.de)

Internet: <http://www.maintain-europe.com>