

Case Study Endress + Hauser Messtechnik GmbH & Co. KG / Masterfoods GmbH

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für industrielle Instandhaltung

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Minimizing of Contingency Risks and Lowering of Costs at a Snack Manufacturing Plant by Endress+Hauser's Installed Base Audit (IBA)

Categories

1. Maintenance Services
2. Measuring and Monitoring Technology

Market Sector

Food Processing Industry

Short Description

- Risk analysis of monitoring equipment and technology including spare parts management at Masterfoods' plant in Viersen.
- Development of a custom-made maintenance strategy and project planning for optimizing plant-specific maintenance, gauging and calibrating intervals.
- Enablement of preventive maintenance within the facility to enhance availability of instrumentation and equipment, increasing operational security and product quality.
- Measures implemented to reduce spare parts stock and capital costs.

Task

Execution of risk analysis and implementation of *Installed Base Audit* (IBA) at Masterfoods GmbH's Viersen plant to secure production against instrumentational contingency risks and to optimize spare parts management.

Preparation

On definition of service volume and structuring and tuning of project processes in collaboration with the customer, the contract for IBA-implementation was set up as well as the services assessment policy and agreement on commissioning.

Implementation

*To reduce contingency risks for the production and subsequent losses, Masterfoods GmbH was on the look-out for specialized companies offering integrated maintenance strategies, to enable optimizing the life-cycle of monitoring and measuring equipment. Masterfoods commissioned **Endress+Hauser Messtechnik GmbH & Co. KG**:*

Some of Viersen plant's production facilities – production running round the clock on 15.000 square metres turning out approximately 10.000 snacks per minute – had been altered and amplified throughout many years. Thus, notwithstanding the fact that Viersen boasts a highly modern application control system and employs regular maintenance checks, the contingency risk for production black-outs persisted. For a start, Endress + Hauser' project team analyzed the complete monitoring installations including the spare parts situation. Continually, Masterfoods' experience on production processes was combined with Endress+Hauser's know-how. During the risk analysis the installed plant monitoring equipment was documented in accordance with the following criteria: 1. highly relevant for maintaining quality standards, 2. very important for guaranteeing a smooth production flow, 3. safety critical or critical for the manufacturing process. On the basis of this analysis Endress+Hauser developed a custom-made maintenance strategy and project planning for optimizing plant-specific maintenance, gauging and calibrating intervals. Preventive maintenance within the complete manufacturing system enhanced availability of instrumentation and equipment, increasing operational security and product quality. Production costs were thus reduced. After successfully implementing IBA in the year 2005, Masterfoods declared to have profited by the new maintenance plan and the new monitoring equipment, which Masterfoods had acquired after enacting IBA: "Our objectives were to reduce maintenance costs and optimize spare parts management by reducing the variety of sensors. We wanted to rationalize maintenance management and enhance the reliability of the processes

involved. First results on utilizing Endress+Hauser's recommendations were impressive. We have reduced our spare parts stock from 219 to 94 parts and minimized the number of sensor types from 122 to 53; this equals a significant yearly cost reduction in the area of spare parts management. IBA also supports our quality management and helps identify the true calibration requirements."

Customer's Benefit

- Transparency of the scope of installed monitoring and measuring equipment.
- Increasing equipment availability.
- Reduction of maintenance costs through traceable and precise calibration.
- Optimizing of spare parts management.
- Enhanced quality control.

Ordering Party

Masterfoods GmbH is a subsidiary of US Mars Incorporated. More than 35.000 employees work for the company. In 2004 Masterfoods GmbH posted sales of approximately € 1,3 billion and positioned itself as one of the leading manufacturers in the food industry. Masterfoods produces and distributes candy foods, ice creme, domestic animals' foods and commodities, groceries and plant care resources. These business sectors feature such internationally known brands like Mars, Snickers, Twix, Pedigree, Whiskas, Uncle Ben's, and Seramis. At the plant in Viersen brands like Twix, Balisto, Dove Waves, the chocolate mix Celebrations, and bisc& are manufactured and distributed. Viersen is one of Masterfoods' important European manufacturing locations of Mars Inc. and services the complete German confectionery market.

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 2004 the Endress+Hauser Group employed a staff of 6.294 and posted sales of € 784,5 million. 71 companies in 35 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 2004 8,9 per cent of E+H sales went into R&D. In the same year E+H filed 168 new products for patents.

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Maintain 2006

The 2nd International Trade Fair for Industrial Maintenance will be staged from October 17th to 19th, 2006 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.

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