



INCREASE CAPACITY AND IMPROVE PRODUCTIVITY

OUR CUSTOMER

A leading supplier of equipment, processes and monitoring systems for milk production.

- Focus on cleaning process solutions to ensure product quality and increase efficiency and profitability.
- Target group are large farms with thousands of cows.

THE CHALLENGE

The dairy industry is part of a shrinking market with a decreasing per capita consumption. Recently, sales of plant-based substitute products such as almond and oat milk have risen by 23% in turnover.

The price of the previously used conductivity sensors was so high that the customer could only use one device per system. The customer had to compromise on the best installation location, which meant that the cleaning cycle had to be controlled from a single point at the end of two circuits.

Multiple input channels are required to collect conductivity and temperature data in order to maintain the quality in the CIP system at the return flow. Therefore there is currently no interface available to access diagnostic information from the sensors. The total cost of the system was too expensive for many dairy farms.

THE SOLUTION – Why ifm?

With ifm's high-quality LDL100 conductivity sensor the customer was able to install additional measuring points in the supply and return flow of each cleaning circuit at lower cost and thus shorten the CIP loop. This enabled him to precisely track the phase shifts between each cycle (washing, rinsing, and product) at several points and clearly recognize when the cycle was finished.

IO-Link-sensors and Ethernet modules from ifm made it possible to acquire several process values from a single device, reducing installation and wiring costs and optimizing the control system. Customer-specific alarms are also possible thanks to IO-Link.

MEASURABLE RESULTS

By using the conductivity sensors, cleaning cycles per day could be shortened by 20 minutes in total. The use of ifm pressure, temperature and conductivity sensors also reduced costs by 60% and increased the efficiency of the system. The additional measuring points also helped to improve and ensure product quality.

