

BIOFUEL PRODUCER REDUCES MANUAL ROUNDS WITH NON-CONTACTING RADAR LEVEL TECHNOLOGY

Customer

Major biofuel producer in Hungary

Application

Wastewater treatment basin

Challenge

One of the biggest biofuel producers in Hungary required accurate and reliable level measurement for their wastewater treatment basins, which contained acidic wastewater, a by-product of raw material production that needs to be managed in a sustainable and efficient way. The basins had a capacity of 500m³ and they were 5 meters deep (197 inches).

The customer was using ultrasonic level transmitters to measure the level of the wastewater basins, but the signal that the ultrasonic transmitter sent was inaccurate and unreliable. This made the plant processes inefficient, as operators had to waste their time and energy performing manual rounds to check the level manually every day, increasing total cost of ownership. The ultrasonic transmitters were also delivering erratic and unreliable measurements due to the presence of vapor and condensation, thus sending alerts/alarms on inexistent peaks, causing unnecessary action from operators. The ultrasonic devices also required maintenance tasks often, adding costs, further increasing total cost of ownership for the customer.

Results

- Reduction of manual rounds and maintenance tasks
- Process efficiency increase
- Release of operators from time-consuming tasks thanks to easy-to-use instrumentation
- Elimination of additional costs associated with maintenance tasks



Image 1. The Rosemount[™] 1208 Level and Flow Transmitter installed in a wastewater treatment basin



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Solution

The customer installed Rosemount 1208 Non-contacting Level and Flow Transmitters. These devices use radar technology and feature a compact and robust housing that allows for installation in applications where condensation and vapors are present. The transmitter also has a fully submersible PVDF housing, providing corrosion resistance in acidic wastewater application.

Process Efficiency Increase

The radar level sensor helped the customer to overcome their process inefficiencies by reducing the operators' manual rounds and the need for maintenance tasks. Reliable and accurate measurement also ensured that alarms only went off when they were supposed to. This is thanks to the 80GHz FMCW Fast Sweep Technologies that the Rosemount 1208 features, which delivers accurate and reliable measurements, while remaining unaffected by process conditions such as turbulence, vapors and condensation. The robustness and reliable measurements, together with the elimination of maintenance needs, helped the customer to reduce maintenance costs by optimizing their operations.

Proven Ease-of-use

Apart from freeing operators from manual tasks, the Rosemount 1208 offers ease of use at every step, from the ordering stage through the website until it is up and running. Its installation takes no more than a couple of minutes and configuring it is simple, which allows operators without prior knowledge of radar technology, to install them easily, enabling them to put their time into other more valuable tasks.



Image 2. The Rosemount 1208 uses radar technology and is unaffected by process or environmental conditions.

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