

FOOD MANUFACTURER ACHIEVES CONSISTENT LEVEL MEASUREMENT AND SIMPLIFIES CLEANING PROCEDURES

Customer

Major food company and manufacturer of preserved meats

Application

Hygienic non-contacting level measurement of brine tanks used for the preserving of ham

Challenge

A major manufacturer of preserved meats required non-contacting level measurement for two brine blending tanks. The brine is used for the preserving of hams and the tank contains non-chlorinated water with a high concentration of non-ionized sea salt. The concentration of product is carefully regulated for correct homogenization. Reliable control of the level is vital to ensure the correct concentration of product for taste consistency.

The customer needed a hygienic device that would not contact the actual product. In addition, CIP cleaning of the tank at high temperatures was carried out regularly, so the device had to be easily cleanable, waterproof and able to withstand high temperatures.

The customer originally trialled a hydrostatic device but found that the top mounted non-contacting radar with a hygienically designed antenna was easier to clean in order to avoid blending different products.

Results

- Reliable measurement unaffected by high temperatures due to CIP cleaning
- Easy installation into existing opening with modular process
- Hygienic design with minimal crevices that withstands
 external washdowns



Image 1. The Rosemount 1408H is installed on the brine tank.



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Solution

The customer installed a Rosemount™ 1408H Non-Contacting Radar Transmitter onto the tank. The Rosemount 1408H is a top mounted, non-contacting device with a compact form factor which allows it to be mounted in tight spaces. The hygienically designed antenna allowed for effective CIP cleaning to avoid blending products between batches.

The all stainless-steel design allowed the customer to also clean the outside of the tank without any concerns about waterproofing due to the Rosemount 1408H's IP6K9K waterproof wiring connections. The device continued to provide reliable measurements throughout the cleaning processes.

The modular process connection meant that the transmitter was easily installed into the customer's existing narrow mounting with minimum installation effort.

Resources

Rosemount 1408H Level Transmitter Emerson.com/Rosemount1408H

Emerson Food & Beverage Industry: Emerson.com/FoodAndBeverageMeasurement Using the Rosemount 1408H
we were able to install into our
existing small opening and can
carry out CIP cleaning without
affecting the measurement.

We are now able to measure
to the top of the tank, which
considerably helps with product
consistency.

Engineering and Tank Manufacturer
Major Food Company



Image 2. Brine sprinkler used on the tanks.

For more information, visit

Emerson.com/Food-Beverage

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