# Södra Cell Solves Challenging Level Measurement Application Using Rosemount<sup>™</sup> 5408

# RESULTS

- Reliable measurement despite dense, thick foam
- Downtime reduced considerably
- Less maintenance needed
- Personnel safety increased

## **APPLICATION**

Mixing tanks 18 meters high containing a mix of lye and soap with heavy condensation and sticky media.

# **CUSTOMER**

Södra Cell Värö, Väröbacka Sweden

### CHALLENGE

The customer needed to measure the level in their 18 meter high mixing tanks. The tanks contained black liquor with a mixture of lye and soap. The media is aggressive and contaminating with a thick foam layer on top, which made for a very challenging environment.

Södra tried a number of level measurement devices but experienced problems with build-up on mechanical devices and, when using guided wave radar, the nozzle was too narrow, causing false errors when the probe came in close contact with the nozzle.

#### SOLUTION

Due to the issue with build-up, the customer needed a solution that was resistant to the media. A Rosemount 5408 Non-Contacting Radar with a three inch process seal antenna was installed. The Signal Quality Metrics function in the transmitter was able to detect abnormal process conditions such as antenna coating or foam, and the PTFE process seal prevented the media from building up on the transmitter, ensuring a reliable measurement.

The transmitter uses Frequency Modulated Continuous Wave (FMCW) technology, which provides higher sensitivity and advanced software functions, allowing it to read through the foam and report the actual level even when the surface is turbulent.

The Rosemount 5408 was integrated into Sodra's DCS system. They were pleased with the positive results and now have less down time, reduced maintenance and a safer/cleaner environment.



The Rosemount 5408 is unaffected by the dense, thick foam and provided a stable measurement



Rosemount 5408 with process seal mounted on a mixing tank



#### **RESOURCES**

**Rosemount 5408 Non-Contacting Radar Level Transmitter** Emerson.com/Rosemount5408

**Emerson Automation Solutions Industries** 

Emerson.com/pulp-paper

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