



Panametrics Ultrasonic Clamp-On Solution

Achieves Cost Savings & Enhanced Environmental Reporting for German Chemical Plant

Summary

A sodium hydroxide producer in Germany wanted to better monitor and control the salty water generated from its production process.

The water undergoes a treatment process to be desalted and when purified, is pumped back into a nearby river.

However, this water is taxed under environmental regulations. The customer was taxed using estimations from governmental bodies, which were based on calculations that the customer suspected to be overestimated. As a result, the customer was incurring higher costs than was expected.

Recognizing an opportunity to reduce its costs and improve its processes, the customer wanted a solution that could be easily installed while providing an accurate measurement. The customer called Panametrics.

Benefits:

- Easy to set up and program
- No process interruption
- Reliability and accuracy
- Easy to embed in an integrated solution



Application

Medium:	salt water
Pipe size and material:	16" Polyethylene (400mm x 36.3mm)
Flow rate:	unidirectional 0 to 400m ³ /h (0 to 1760GPM)
Temperature:	ambient
Requested accuracy:	<±2% of reading

Challenges

The location of the meter is off-site, more than 3km distance from the customer's plant. There was 230V AC power supply available, but no possibility of reporting the flowmeter data to the plant's digital control system. Therefore, the flowmeter readings had to be collected in a data-logger to store the flow data for reporting purposes. The datalogger needed to be battery-powered, because in case of a power outage the flow data needed to be time-stamped.

As the ambient temperatures can go below the datalogger operating temperature limits, it had to be installed in a heated cabinet with a thermostat.

Solution

5x ultrasonic clamp-on Aquatrans AT600 flowmeters with AT10 transducers were selected.

Several months since installation, the customer confirmed the flowmeters were working to the environmental body's satisfaction. The customer also said the Panametrics solution has generated cost-savings since day one and is delighted with the results and the level of support.

As a result, the customer has since placed additional flowmeter orders for different applications.

