

Application note

Major Global Mineral Water Bottling Plant in Saudi Arabia uses Panametrics AquaTrans AT600 to replace faulty electromagnetic flow meters

Benefits:

- Hygienic Flow meters
- No Shut down required
- Same meter suitable for all line sizes
- No periodic calibration required



Summary

Major multinational food and drink processing company requested support to validate the performance of existing electromagnetic flow meters, that were failure-prone, in their water treatment plants. The liquid clamp-on flow meters were used to verify the plant balance for the inline meters out of accuracy specifications or out of order.

Application

Water treatment plant 1" – 6" SS316 lines, mineral water. Temp. 20°C – 50°C

Challenge

The electromagnetic flow meters at the water treatment plant experienced failures & performance issues. After replacing several meters the failures continued.

From the discussion with plant process team it appeared that the reliability issues with the inline flow meters started after they changed the Clean-in-Place process from chemicals to ozone. Ozone led to electrode oxidization from the mag meters over time.

Portable clamp on flowmeters were used to check some of the meters. The tests were quite successful.

Solution

AquaTrans AT600 meters were installed for two weeks with existing electromagnetic flow meters to validate the first findings. The AquaTrans AT600 reading was very stable and within the expected accuracy as per the pump curves according to the customer.

The customer decided to purchase six meters to replace faulty electromagnetic flow meters and recommended the same solution to be implemented in other plants within the country.