



COFFEE BEVERAGE PRODUCER REDUCES MAINTENANCE COSTS AND IMPROVES RELIABILITY WITH VORTEX FLOW METER TECHNOLOGY

Customer

Coffee beverage producer in North America

Application

Coffee extract flow measurement

Application Characteristics

Flow Rate: 0-66 gpm (0-250 L/m), Temperature: 68-392 °F (20-200 °C), Pressure: 290 psig (20 bar), Viscosity: 5 cp, Meter: 1.5" flanged (40 mm)

Challenge

Accurate flow measurement and effective pipeline cleaning are keys to the successful production of coffee beverages. After properly roasted and ground coffee particles are mixed with hot water, the coffee extract flow is measured.

The solid particles contained in the extract and the rapid changes of temperature caused by the pipeline cleaning process caused serious problems to this customer's existing flow meters.

This producer had installed magnetic flow meters with ceramic lining to try to prevent clogging of the solid particles, and sustain the high temperatures involved. The solution did not prove successful, and resulted in flow meter lining damage caused by the dramatic temperature changes.

The coffee producer also installed several other manufacturers' vortex flow meters, but they had significant maintenance requirements due to the clogging of the flow meter sensor ports and crevices from the solid particles running in the process.

Results

- Reduced flow meter maintenance costs by over \$1000 annually
- Eliminated risk of flow meter damage during high temperature line cleaning
- Improved measurement reliability



An installed Rosemount 8800 Vortex Flow Meter

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Solution

The Rosemount™ 8800 Vortex Flow Meter solved their clogging problem and eliminated damage due to the high temperature cleaning process. The Rosemount patented all-welded, non-clog design proved to be a cost effective solution to the challenges this beverage producer faced.

By installing the 8800, this customer saved over \$1000 in maintenance costs annually: 12 cleanings per year, 2 hours per cleaning, at \$43 per hour.

Beverage producer saved over \$1000 annually in maintenance costs by installing Rosemount 8800 Vortex Technology

The Rosemount 8800 Vortex Flow Meter provides a low-maintenance, non-clogging solution that eliminates damage associated with high temperature cleaning processes.

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