

JUICE MANUFACTURER IMPROVES MEASUREMENT AND RELIABILITY OF CIP FEED WITH MAGMETER TECHNOLOGY

Application

CIP cleaning fluid feed to blending plant

Application Characteristics

Pressure up to 4 bar, Temperature 40 to 90 °C, Cleaning agent concentration 1 to 21/2%

Customer

Juice manufacturer in Europe

Challenge

To prevent harmful bacteria contamination, this plant placed stringent requirements and controls on the cleanliness of the process during the manufacturing of fruit juices. To ensure that process piping and tanks are adequately cleaned after each production run, cleaning agents are routinely pumped to various parts of the plant. In order to have the desired result, the cleaning fluid flow rate has to be monitored and controlled closely to ensure adequate quantities of cleaning agent are pumped to the syrup room, heat exchangers, blending and bottling areas, and fillers. Without adequate flow measurement, cleanliness of this process cannot be assured and contamination may result.

Furthermore, cleaning agents are often mildly acidic or caustic and can accelerate corrosion and degradation of sensitive flow instrumentation. As such, careful selection of a flow meter is necessary to ensure durability under these difficult circumstances.

Results

- · Improved process uptime
- Improved process control
- Reduced inventory costs

The Rosemount™ 8721 Hygienic Magmeter provided an accurate and reliable measurement improving process control.



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Solution

This manufacturer selected the Rosemount 8721 Hygienic Magmeter for this difficult application. The customer was already using the 8721 for flow measurement in other parts of the manufacturing process with great success. The wide variety of electrode options allowed the user to select a material that would withstand the corrosive properties of the Clean-In-Place (CIP) fluid, extending the life of the flow meter.

In addition, because this manufacturer was already using the Rosemount 8721 Hygienic Magmeter, they were able to minimize the impact on their inventory costs.



Rosemount 8721 Hygienic Magmeter installation

The durability of the Rosemount 8721 Hygienic Magmeter reduced process downtime caused by corrosion due to the CIP fluid.

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