



BEVERAGE MANUFACTURER IMPROVES CONSISTENCY OF BASE SOLUTION AND REDUCES INSTALLATION COSTS

Application

Mixing base syrup solution consisting of water and sugar

Application Characteristics

Fluid: Water, Pressure: up to 3 bar, Temperature: 20 - 80°C,
Measurement Range: 0 to 2820 hL/h max,
Density: 11-12°BRIX (1,044-1,048 kg/l)

Customer

A beverage manufacturer in North America

Challenge

Achieving a precise BRIX density value is essential to create an accurate syrup solution for the production of soft drinks. The ratio of water to sugar in the buffer tank is the key component in determining the BRIX density value. The consistency of this ratio is critical in order to have the right sweetness of the final product. If this consistency is not maintained, the customer will experience product that is out of spec leading to rework and waste.

This application requires hygienic and accurate flow measurements that withstand high temperatures and vacuum pressures during the clean-in-place (CIP) cleaning process. This beverage manufacturer had been unable to find a solution that would work in a sanitary application and withstand the extreme conditions of this CIP process.

Results

- Reduced variability of syrup solution content by 0.45%
- Installation cost savings of \$300 per meter
- Reduced potential leak points by 50%

The Rosemount™ 8721 Hygienic Magmeter provides improved accuracy, is suitable for CIP processes, and provides reduced installation costs.

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Solution

The Rosemount 8721 Hygienic Flow meter was installed as a solution to these challenges. The rugged design of the Rosemount 8721 can withstand the CIP process, but is also built for hygienic applications. The accuracy of the syrup solution was improved, ensuring the right BRIX density time and time again, which virtually eliminated rework for out-of-spec product. In addition, the direct-weld process connections available with the Rosemount 8721 integral transmitter eliminated two potential leak points and reduced installation costs by \$300.



An installed Rosemount 8721 Hygienic Flow Meter

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