

Micro Motion® Direct Connect™ Technology Provides Added Value at Significant Cost Savings

BENEFITS

- Eliminates the need for local transmitters
- Reduces installation footprint
- Simplifies end-user interface
- Reduces maintenance and nuisance calls
- Increases accuracy via fast, direct digital communications



PROCESS

Adcor Industries is a leading original equipment manufacturer (OEM) and turnkey supplier of blending skids, filling systems, and high-speed packaging technologies. Adcor blending systems control the production of many of today's most popular beverages. Adcor relies on Micro Motion® products for accurate recipe management of carbonated and non-carbonated drinks, juices, and beer.

OEMs and end users save up to \$3,000 per flowmeter using Direct Connect technology

CHALLENGE

Precise metering of ingredients such as High Fructose Corn Syrup (HFCS 55) is critical in the blending process. In particular, control of sucrose concentration is a key factor in quality control. Due to specific sport drink requirements, it is also important to be able to meter several different recipes with no loss of accuracy.

Adcor also contracts to deliver a simplified operator interface for customer use.

SOLUTION

ELITE® Coriolis meters from Micro Motion deliver both the accuracy and the turndown to meet stringent customer requirements. Adcor selected the ELITE meter with the Micro Motion Direct Connect™ solution, which eliminates the need for a local transmitter interface. Adcor uses Modbus RTU direct to the meter to map the variables, diagnostics, and configuration options that will be available for meter start-up and for the operator interface.

After the initial configuration is completed, a simplified interface is provided for the plant floor operator.

www.micromotion.com



Figure 1 Typical Adcor Blending Skid



For more information:
www.EmersonProcess.com/solutions/food_bev
www.micromotion.com



If required, Adcor engineers can connect remotely to change configuration parameters or troubleshoot any issues. Direct Connect provides access to all meter variables, such as temperature, density, and tube behavior, enabling an expanded view of the actual process.

To measure concentration, in-line density data from the Coriolis meter is fed into algorithms in the Programmable Logic Controller (PLC) on the blending skid. The resulting data enables precise in-line control of the sucrose in the dissolving process.

Cost savings include:

- Elimination of the transmitter component
- Reduction of cabinet size
- Reduction of wiring
- Reduction of operator nuisance calls
- Reduction in maintenance and troubleshooting costs due to the ability to interrogate the meters remotely.

Brian Wallace, director of Adcor's packing business, comments: "We have always valued the performance of Micro Motion meters in our blending process. They offer a tiered product approach that allows us to select the best and most cost-effective meter for the application.

"The ability to interface the sensor's output directly to our control system provides better value for our customers. It allows us to eliminate the transmitter and local interface and provide a simplified view for our customer. This has eliminated some nuisance calls while still providing a back door for us to view diagnostic information remotely and change configurations as needed. In the past, a call might have meant downtime and a physical trip to the customer site."

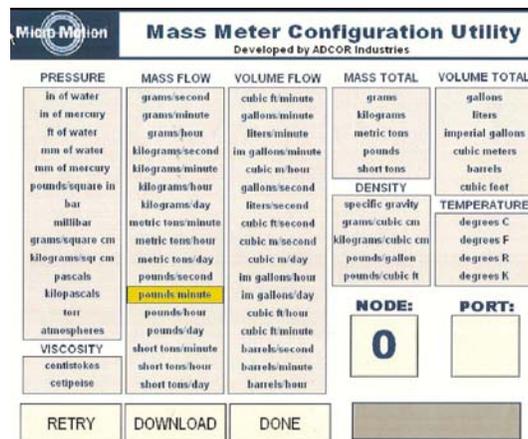


Figure 2 Configuration Setup Screen for Adcor Engineers



Figure 3 A Family Affair – Micro Motion F, R and CMF (ELITE) Direct Connect Meters in Beverage Blending Plant