

# Micro Motion® Accurate Flow Measurement Improves Throughput and Reduces Rework Requirements

## RESULTS

- Accurate repeatable measurement of both large and small batches
- Accurate measurement over wide flow range
- Revenue increased by \$26,800 per year
- Costs reduced by \$21,240 per year



## APPLICATION

A manufacturer of specialty coatings adds resins, water, and other ingredients to a vessel, waits the required number of hours, and tests the properties of the mixture. If the mixture meets specifications, it is sent on to packaging; if it does not, it is reworked in the vessel. Rework time averages four to seven hours.

Different types of flowmeter are used to measure the different ingredients. A Micro Motion® flowmeter is used to batch resin, while a positive displacement (PD) meter is used to batch water.

## CHALLENGE

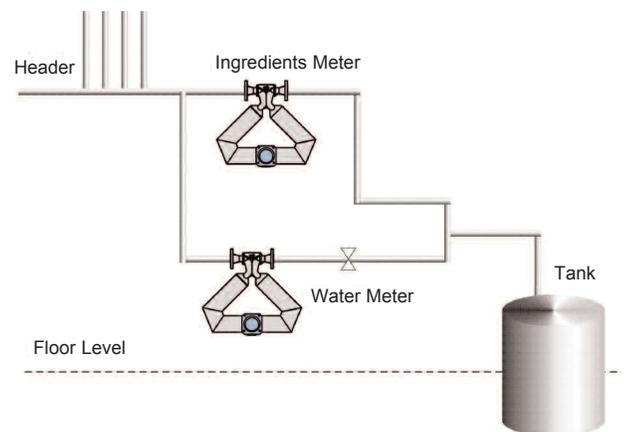
The Right First Time (RFT) metric for this process was unacceptably low. Because this product is made in the customer's largest vessel, any rework time has a significant effect on output.

Water was the critical ingredient in meeting the very tight specification. The PD meter's accuracy and repeatability was satisfactory for small batches, but not for large batches. Additionally, the application required a flow range that was greater than the PD meter could measure accurately.

The customer's goals were to improve the RFT metric, minimize rework, and improve productivity by increasing throughput through this vessel.

**Right First Time metric increased by 21%.**

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### SOLUTION

A Micro Motion ELITE® sensor with explosion-proof batcher was installed to measure the water, increasing the RFT metric by 21%. As a result, this process requires less rework and less maintenance and recalibration. Improved throughput allows the customer to use the vessel for more products, increasing overall plant productivity and improving flexibility, responsiveness, and scheduling.

In the first year of operation, additional revenue due to improved availability was \$26,880, while operations and maintenance costs were reduced by \$7800 and rework and waste costs were reduced by \$13,440. As a typical ELITE installation costs less than \$10,000, the payback period on this installation was approximately two months.

