

# Specialty Chemical Company Upgrades Micro Motion® Meters, Saves \$400,000 Annually

## BENEFITS

- Operational costs reduced more than \$400,000 per year
- Operators freed up for more demanding tasks
- In-line verification saves \$1000 per quarter



## PROCESS

A premier global supplier of monomers, resins, and other specialty chemicals produces a wide range of coatings—more than 150 different chemical recipes, which are changed out frequently. The supplier runs more than a dozen lines, but this still represents more than 10 different recipes per meter. This extreme variability places significant pressure on plant yields and profitability.

The supplier is a long-time user of Micro Motion® Coriolis flow technology. They use the Coriolis flow measurement for accounting and yield calculations; they use the Coriolis density measurement for interface detection.

## CHALLENGE

The supplier was using relatively older Micro Motion devices. Typically this is not a problem, because Micro Motion meters tend to be in service for many years without repair or maintenance requirements. However, as part of their operations, the supplier periodically steam-cleaned these meters (depending on product), so occasionally the meter would start empty. This would create a false output until the meter filled with product.

Operators were trained to watch for this false output, and would compensate by keeping flow valves shut. However, human error was on ongoing problem. Inaccurate batches were resulting in product rework, which meant lost time and money.

Furthermore, two operators normally took each meter offline for 4 to 8 hours each quarter to check its calibration against a load cell.

*Raw material consumption was reduced by \$200,000 in six months.*

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**SOLUTION**

Newer Micro Motion meters are equipped with an “empty-full-empty” feature. In addition, the newer Micro Motion devices were far better at interface detection. The chemical supplier installed these new meters and observed the results for one year. They saw their yields improve. Raw material consumption was reduced by \$200,000 in six months.

Additionally, the meter verification function of the new meters allowed the supplier to check the calibration of their meters every quarter without taking down the lines. This meant that two operators were freed up for other duties, and the lines were essentially never down. The supplier believes they are saving at least \$1000 per quarter due to the meter verification feature.

