

# Micro Motion® Coriolis Flowmeters Put an End to Inferior Liquid Resin and Waste

## RESULTS

- Increased throughput by 50%
- Increased in profits by \$50,000 to \$90,000 per month
- Increased accuracy in measuring products, resulting in a more consistent, higher quality end product
- Eliminated disposal costs for inferior product
- No flowmeter maintenance required



## APPLICATION

A large specialty chemical manufacturer located in the southeast United States produces basic liquid resin. Basic liquid resin is used as a raw material to manufacture epoxy products, which are used in the automotive, computer hardware, and sporting goods industries. The manufacturer produces this material by blending a liquid resin component with caustic. Caustic is added to ensure hardness in the final epoxy product.

## CHALLENGE

Basic liquid resin customers will pay a premium price for high quality product, while average quality product is sold at manufacturing costs. Poor-quality product cannot be reworked or recovered, and, therefore, must be incinerated. Tough foreign competition in the manufacturer's automotive business entered the market with a high quality product, which forced the plant to make some much needed process upgrades.

Liquid resin and caustic are blended at a ratio of 100:1 (a difficult blend ratio to manage). Previously, the manufacturer used two loss-in-weight mass measurement devices for the blend operation. These devices performed satisfactorily when they were properly calibrated, but they rarely maintained their calibrations. Troubleshooting was also difficult and time consuming, because each loss-in-weight device had 15 I/O points to the control system.

[www.micromotion.com](http://www.micromotion.com)



*A chemical manufacturer beat the competition by producing a high quality product with Micro Motion meters.*



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[www.EmersonProcess.com/solutions/chemical](http://www.EmersonProcess.com/solutions/chemical)  
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**SOLUTION**

Two Micro Motion® Coriolis flowmeters were installed to replace the outdated loss-in-weight devices. “The Micro Motion meters are amazing,” says the manufacturer. “Now we can control (the mix) to three decimal points. We could only control to two points with our previous system. We can operate at any rate we want; there are no limitations on our flow rate.”

With the addition of only two Micro Motion flowmeters, throughput has improved by 50%. The facility’s profitability has been increased by \$50,000 to \$90,000 (U.S.) per month due to improved product quality and reduced disposal costs for inferior-quality product. Twenty-eight I/O points have been freed up in the control system, making the process much easier to monitor and maintain. This chemical manufacturer was able to stay competitive with its improved liquid resin product, thanks to Micro Motion flowmeters.

