

New 4200 2-Wire Transmitter with Coriolis Flow Meter Meets Critical Need at a Major Chemical Plant

RESULTS

- Improved flow measurement accuracy on the distillation column reflux line
- Removing impulse lines increases flow measurement reliability and avoids process shutdowns
- Customer avoided \$25,000 in unnecessary installation costs



APPLICATION

Measuring the distillate in a solvent distillation column

CHALLENGE

A distillation column which was originally installed with 2-wire differential pressure meter was in need of replacement. The meter's impulse lines were prone to plugging, leading to unplanned shutdowns and lost production time. Unplanned shutdowns could lead to days of lost production time and would happen multiple times a year. This distillation column is in a remote part of the plant and the meter is difficult to access as it is 20 feet up without scaffolding in place. The customer wanted the benefits of Coriolis flow measurement without the increased installation costs of a 4-wire device.

SOLUTION

The customer installed an Emerson Micro Motion® ELITE® Coriolis flow meter with a remote-mount 4200 2-wire transmitter. They were able to re-use the existing two wires from the legacy flow meter and avoid \$25,000 in additional installation costs had they gone with a 4-wire transmitter in this remote application. This 2-wire solution enables a more accurate and reliable flow measurement for reflux control that does not use impulse lines, thereby avoiding future unplanned shutdowns and downtime. The remote transmitter allows for operators to quickly check the reflux flow rate, easily access transmitter configuration, and run the Smart Meter Verification meter health diagnostic.

Micro Motion ELITE Coriolis flow meter with a remote-mount 4200 2-wire transmitter enables a more accurate and reliable flow measurement

