

Micro Motion® Improves Handling of High Temperature High-Viscosity Fluids

RESULTS

- Improved safety
- Decreased maintenance and downtime
- Decreased product waste



APPLICATION

A chemical plant produces rosin for use in the adhesives industry. Rosin is shipped in 50-gallon drums. To fill the drums, the rosin is heated to 330-400 °F. A conveyor belt moves four drums at a time into position in the filling station. Motion sensors stop the drums at the correct position, and a filling arm drops down over the drums. A PLC manages the flow of rosin, one drum at a time. When all four are filled, the conveyor belt moves the drums to the capping area, and then to packaging.

CHALLENGE

Load cells under the filling station were used to measure the amount of rosin delivered to each drum. If a drum was poorly positioned, hot rosin spilled onto the load cell, requiring expensive maintenance. Additionally, if the load cell was inaccurate, hot rosin would spill over the sides of the drums, again creating housekeeping and maintenance problems.

SOLUTION

Micro Motion® supplied an experienced third-party integrator to spearhead the process improvement project. Both problems were addressed: the overfill problem was corrected by installing a Micro Motion meter to replace the load cells. Because only one drum is filled at a time, a single meter on the filling arm can measure the amount of hot rosin delivered to each drum.

www.micromotion.com



A Micro Motion meter measures the flow of hot rosin into drums.



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



CHEMICAL

In the first six months of operation, the system has run beyond expectations, and has saved an estimated \$5,000 in maintenance costs. Estimated savings from enhanced compliance with safety, health, and environment regulations is \$2,500. When all factors are considered, the new system contributes approximately \$17,500 per year to the manufacturer's bottom line.

