



APPLICATION SPOTLIGHT

Cellular Wireless Telemetry for Millwork Painting Operation



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APPLICATION:

WindsorONE Mills is a producer of architectural wood trim that is primed using a vacuum coating process. In their process, the finished wood trim is dipped into a tank filled with paint; excess paint is suctioned off and returned to the tank. Fresh paint is added to the tank to maintain an appropriate volume.

PRODUCT SUPPLIED:

- **RANGER Cellular Transmitters** with Modbus inputs
- **TRICOR TCM 028K** Coriolis Mass Flow Meters

CHALLENGE:

WindsorONE has multiple paint lines at multiple plants. Observing basic tank level sensors and tracking paint purchases, they noticed that one plant was consuming more paint than another for similar board feet of product coated. This additional paint use was incurring additional costs. The processes were the same at each plant: why was one plant using more paint?

Through conversations among WindsorONE, their paint supplier, and SignalFire's sister company AW-Lake, it became clear that the process WindsorONE had been using to measure paint usage was imprecise as well as inconsistent across its various plants. They needed a method of measuring their paint usage that was accurate and easy to implement at all of its plants so they had consistent metrics across their operation.

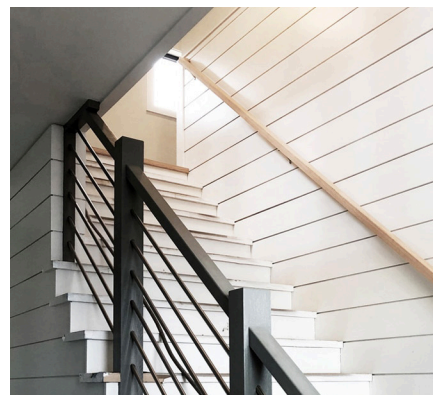
SOLUTION:

To accurately measure the water-based paint WindsorONE uses, AW-Lake's TRICOR TCM 028K Coriolis meter was proposed. The gearless design of the Coriolis meter is a natural fit for water-based paint, which can easily separate and become a slurry that inhibits the moving parts of standard gear meters. We also suggested AW-Lake's demo program, which reduces risk by allowing customers to test our equipment within their process and determine whether it delivers the data and performance they need.





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Their IT team was hesitant to integrate the meters onto their network for the demo, so we proposed using the SignalFire RANGER cellular transmitter and cloud-based dashboard for usage tracking. The RANGER transmitters quickly integrate with a variety of sensor types, providing power to ultimately display and monitor the measurements on a cloud base interface through the LTE-M cellular network. We

delivered the Coriolis meters already attached to the RANGER transmitters, providing the WindsorONE team with a plug-and-play paint metering solution.

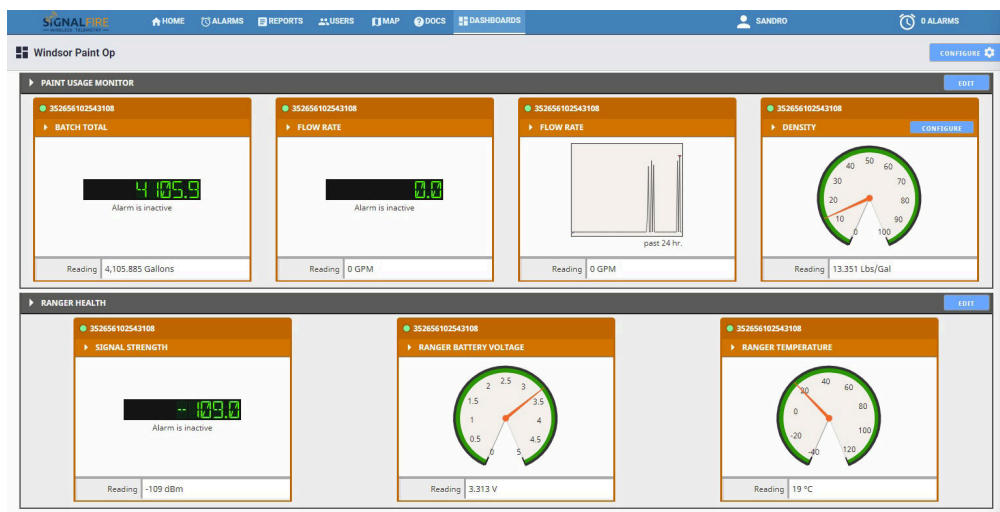
As part of the Flow Division of TASI Group, SignalFire is connected to AW-Lake, a leading provider of flow measurement technology.



SignalFire RANGER Wireless Transmitter



TRICOR TCM 028K Coriolis Flow Meter



SignalFire's Cloud interface offers customizable dashboards so you can view all of your most critical data the way you want it on your PC or mobile device.