Smart Wireless Solutions Enable Temperature Profiling and Tank Level Measurement Redundancy at PPG

BENEFITS

- Easy, cost-effective installation of self-organizing network
- No maintenance required on the network "It just runs"
- Smart Wireless network coexists with other wireless systems



CHALLENGE

PPG needed a cost-effective and reliable solution to enable them to monitor various areas of a vast 765 acre plant which is dense with pipes, buildings and equipment.

SOLUTION

PPG Industries installed and commissioned Smart Wireless solution at its expansive Chemical Division facility in Lake Charles Louisiana. The production installation follows field trials of Emerson's self-organizing wireless networks conducted by a PPG cross-functional process and corporate IT personnel team. The team verified the reliability and coexistence performance of the network, and also deployed it in the plant.

The plant's Smart Wireless network uses ten wireless Rosemount® transmitters for pipeline and steam header temperature measurement which enables operators to watch for cold spots and adjust steam throughput.

PPG also commissioned eight wireless Rosemount transmitters on the self-organizing mesh for tank level measurements to provide backup of primary radar level measurements, helping ensure level control.

RESULTS

PPG estimates installation costs for wired instruments that include near \$20 per foot for wiring and conduit. These wireless measurements have the potential to increase process reliability and provide low-cost redundant measurement. PPG is using wireless to make operational improvements by capturing and using new data, and is also anticipating cost advantages.

"Maintenance on the Emerson network?" questioned Reese Borel, process control specialist at PPG. "I haven't had to do any. It just runs."

"When Emerson first approached me with their industrial wireless solution, they said 'We're plug and play.' I have to admit I laughed; nothing I'd seen so far was that easy. But I'm a believer now. Five minutes after installing it, the wireless network came to life. It's been there ever since."

Tim Gerami Senior Design Engineer, PPG Industries

