Kistler-Morse®

Sonologic Products

case history

Market: Chemical Whiteners, Paints

CUSTOMER

SCM Chemicals facility in Baltimore, MD, produces titanium dioxide -- a whitener used by the plastics, automotive, paper, ceramics and rubber industries. SCM Chemicals is headquartered in Baltimore, MD.

PROBLEM

Previously, the facility had been using outdated technology such as capacitance probes and differential pressure transmitters to measure the level of proprietary chemicals in tanks. But these technologies were relatively inaccurate and unreliable, according to Nick Tountasakis, Instrumentation Foreman at the plant. SCM also had been using another company's ultrasonic level detector but was getting poor results with it. "It worked only under ideal conditions," Tountasakis says, "I was disgusted with it. We weren't getting the accuracy we needed."

APPLICATION

Beginning in the late 1980's, the facility switched to Kistler-Morse's weight and level indicating systems. 50-foot Sonologic transducers were installed on 20 fiberglass storage tanks to provide level indication; another 10 tanks were outfitted with 20-foot Sonologic transducers. A bolt-on Microcell assembly was used on one particularly difficult chemical liquid tank application due to excess vapor above the liquid's true level. "It was kind of a crude way to set it up, but the Microcell assembly does a real nice job for us," Tountasakis says.

Finally, SCM installed Kistler-Morse Load Stand transducers beneath an important three-legged vessel used for mixing and batching ingredients. The Load Stands weigh chemical powders and granular materials in batch sizes that range from 600 lbs to 30,000 lbs. Continuous weight readings are sent to an Allen-Bradley programmable logic controller via 4-20 mA outputs, to provide information for regulating the batching process.

BENEFIT

SCM has achieved improved accuracy with its weight and level indicating systems, while getting better equipment reliability. How good is the accuracy? "I've got one liquid acid tank that's a difficult application," Tountasakis says. "The range of the tank is 24 feet, and we get continuous accurate measurement within one inch of true product level. And Kistler-Morse has a teflon-faced sensor, which alleviated any problems with condensation or acid mist eroding the unit," he added.

CONCLUSION

"I've been at this plant for 18 years," Tountasakis says, "And I'd call the Kistler-Morse equipment outstanding. You put them out there and don't worry about them. They require very low maintenance. I know we've had some of their equipment in here for six years, and it only requires the occasional calibration check."

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