Remote Safety Shower Monitoring Using Wireless Transmitters

The customer, a chemical manufacturing and refining plant, wanted to upgrade remote safety shower monitoring systems to comply with OSHA guidelines. Though the existing shower facilities fall under a grandfather clause and are not subject to more stringent OSHA regulations, the customer wanted to reduce the potential for insurance and litigation issues that could occur with on-the-job accidents. Honeywell XYR5000 wireless transmitters provided a reliable and cost-effective solution.

**Problem**
As required by OSHA First Alert Response guidelines, in the event of an incident the plant operator should be alerted of a running shower within 5 to 10 seconds of its use. The shower indication can also serve to alert plant operations to bigger, potentially more significant problems in the remote areas of the plant.

Many of remote safety showers in the plant were located in explosion-proof areas with no existing wiring. The estimated cost just to run cable to 17 shower sites in explosion-proof areas for monitoring purposes was $600,000, which includes trenching, resurfacing, cable, and conduit. It does not include the extensive time involved to install the wiring in the area for monitoring. The customer needed a more cost effective alternative to installing monitoring systems for the remote safety showers.

**Honeywell Solution**
Using wireless technology to monitor remote shower usage eliminated the need for Class I, Div 1 instrumentation and the associated wiring and installation costs. The wireless system, using either a target alarm or pressure, alerts the control room immediately, so situation management can be implemented sooner.

The costs to purchase wireless transmitters and install them in the 17 shower areas ran about $20,000. The customer saved $580,000 installing wireless transmitters, a price that made OSHA compliance a far less costly proposition.

**Customer Comment**
“We were able to meet OSHA requirements in a very short amount of time – and at one-tenth the cost of the other solutions we considered.”

**Benefits**
Honeywell XYR 5000 wireless transmitters remove the barriers to monitoring variables where traditional transmitters are too costly to implement. They’re designed for applications with no access to power, hazardous or remote locations, where instrumentation changes are frequent or where manual readings are taken today.

XYR 5000 wireless transmitters reliably and securely transmit up to 2000 feet on a 3-5 year battery life with an accuracy of ±0.1%. You’ll quickly and safely monitor process areas and assets you’ve only ever dreamed of.

- Reduced Installation, Maintenance and Operating Costs
- Improved Product Quality
- Meets Regulatory Requirements
- Ensures High Uptime
- Enhances Flexibility

Find out more
For an on site demo or further information contact your Honeywell representative. For a contact in your area visit www.honeywell.com/imc

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