

**Case Study: Honeywell XYR5000 Wireless Transmitters**

**Application: Monitoring Remote Safety Shower Usage for OSHA Compliance  
Chemical Manufacturing and Refining Plant**



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***Problem***

This customer chose to upgrade remote safety shower monitoring systems to comply with OSHA guidelines. Though the installed units 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.

By OSHA First Alert Response guidelines, an operator should be alerted to a running shower within 5 to 10 seconds of its use. The shower indication can also serve to alert the operator to a bigger, potentially more significant problem in the remote plant.

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***Current Business Result***

Safety showers in the plant are located in an explosion-proof area with no existing wiring. With the explosion-proof area, the estimated cost just to run cable to the site for monitoring 26 showers was \$1.5 million, which includes trenching, resurfacing, cable, and conduit. It does not include the extensive time involved in wiring the area for monitoring.

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***Solution***

Using wireless technology to monitor shower usage eliminates the need for Class I, Div 1 instrumentation and the associated wiring and installation costs. The wireless system, using either a target 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 26 shower areas ran about \$50,000. The customer saved \$1.45 million installing wireless transmitters, a price that made OSHA compliance a far easier decision to make.

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***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.**

