

**Case Study: Honeywell XYR-5000 Dual Thermocouple
Wireless Transmitters**

**Application: Asset Protection: Measuring Temperature in
Alki-Unit Compressor Motor Bearing
Oil Refinery**



Problem Customer suffered a recent compressor explosion, probably from bearing failure, that could have been prevented with early indication.

Current Business Result Customer suspects that past failures are due to failing bearings. The most accurate way to confirm the problem is by monitoring bearing temperature.

By monitoring bearing temperature, the customer could predict failure and potentially prevent it by implementing a preventive maintenance program. Cost of failure and replacement of compressors is estimated at over \$1 million per unit.

Because hazardous gases were present near the compressor unit, the application must be treated as explosive, and wiring between the compressor and the control room must meet Class I, Div 1 spec. This makes wiring cost extremely high, and the time needed to wire the units quite lengthy. The cost of hard-wiring the 32 transmitters required to monitor the critical temperatures could not be justified.

Solution Honeywell's XYR5000 wireless was the obvious solution. It eliminates nearly \$100,000 in wiring costs, and brings the critical temperature information into the existing DCS system for monitoring and alarming. The Honeywell system provides the field data needed – at a fraction of what a hard-wired solution would cost. The installation and commissioning time was also greatly reduced.

The customer's engineering group had full confidence in the Honeywell brand for its solution, and had worked with Lesman enough to know the capability of their local support team. Lesman and Honeywell's field support engineers performed the configuration in a matter of hours, to make the startup as quick and painless as possible.

Customer Comment **Having confidence in the product and the local support made all the difference. Buying from Lesman isn't just about the product – it's about the after-purchase support, too.**