We Make Wireless Work!

Case Study: Honeywell XYR5000 Wireless Transmitters

Application: Monitoring Bearing Temperatures
Tandem Cold Rolling Steel Mill

Problem	In a mill application, it's critical to monitor bearing temperatures to predict bearing failure. But very often, water and moisture in the conduit runs to the thermocouples, collects in the thermocouple heads, and creates inaccurate temperature readings. Due to these inaccurate readings, the alarms used to detect bearing temperature weren't reliable. Low readings meant that a bearing could heat up without the alarm unit detecting the problem.
Current Business Result	Instrument technicians tried to seal the thermocouple heads and conduit with Duxseal or silicone, but moisture still got in. If the high bearing temperature isn't detected, bearing failure will certainly result, causing thousands of dollars in downtime and repair. Techs then have to enter the hazardous area to replace thermocouples.
Solution	The customer installed Honeywell XYR5000 wireless temperature transmitters with integral thermocouples to monitor the bearings. Because the thermocouple is sealed within the transmitter and wireless technology doesn't require wire or conduit, there's no conduit entry point for water or oil – and no more failures from moisture in the instrumentation. With the new equipment, instrument technicians can predict possible failures and take preventative measures to avoid bearing failure. This information helps keep employees out of hazardous locations, preventing possible injury, and reduces process downtime that occurred with bearing failure.
Customer Comment	**Since we installed the wireless transmitters, we've had no more bearing failures caused by sensor or wire failure.**