# **Success Story**

Monitor Humidity in Air Compressors and Dryers to Keep Furness Testing Equipment Running

#### The Problem

A leading manufacturer of quick couplings provides products that perform on critical customer components under the most extreme conditions. This means the couplings need to undergo rigorous testing before being shipped to customers to ensure they meet customer specifications and demands.

For this Wisconsin-based facility, operators purchased 30 Furness Systems to test products. At a cost of \$16,000 apiece, these machines are highly advanced, yet very sensitive to moisture and humidity. If condensation or moisture collection were to occur, it would impact the testing process, affect customer orders and require Furness equipment be shipped back to the manufacturer for repair.

SensoNODE™ Gold is Parker's series of networked wireless sensors developed for uninterrupted condition monitoring for use with cloud or local applications. SensoNODE Gold Sensors monitor assets for changes in pressure, temperature, humidity, flow, current, displacement, analog signal and vibration to help predict problems and prevent downtime, and delivers the information to any internet-connected device.

## The Solution

To make certain the Furness Systems operated at peak performance and not be impacted by humidity and moisture in the lines, the manufacturer applied continuous condition monitoring to its compressors and air dryers critical to the process. Parker's SensoNODE™ Gold Sensors and Voice of the Machine™ Cloud Software were installed for monitoring and presented the opportunity to take instant measurements wirelessly, and review those readings from anywhere with an internet connection.

Parker's condition monitoring solution alerted operators the air dryer in the compressor room had high levels of humidity. Upon inspection, it was determined a pressure switch had malfunctioned in the air dryer, causing moisture buildup exceeding threshold recommendations. If undetected, further damage would have occurred, impacting the entire Furness System, causing inadequate quick coupling testing and costing the manufacturer thousands of dollars in repairs and late product shipments to customers.

Voice of the Machine™ is Parker's cloud-based uninterrupted condition monitoring software that provides machine alerts, status and analytics in real time. An intuitive interface makes connecting to sensors uncomplicated and measurements easy-to-read. With customizable dashboards and alarms, you can focus on the data that's most important to you and be alerted when your measurement thresholds are exceeded. Exporting of data is done with a click of one button, which sends a .csv file right to your internet-connected device.



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### **Success Factors**

Continuous condition monitoring saved the manufacturer from having to spend weeks of rebuilding the Furness System at a potential cost of \$2,000 - \$4,000 apiece.

Record reliable accurate measurements and monitor assets remotely from any mobile device.

Voice of the Machine Cloud Software immediately notifies of deviations and exceptions when thresholds are breached.

# **Customer Value**

A leading quick coupling manufacturer heavily relies on Furness Systems to ensure their products are tested to the highest standard. SensoNODE Gold Sensors and Voice of the Machine Software alerted operators when humidity entered the machines' line, which could have caused it to go offline. Immediate steps were taken to avert any serious issues, saving the manufacturer downtime, significant costs and from supplying customers with a faulty solution.