

Success Story

Condition Monitoring Helps Clear the Air and Solve Underlying Compressor Issues

The Problem

The demand for compressed air in the manufacturing industry has never been greater. Machines and equipment rely heavily on mechanical air compressors as a dependable source to providing durable, clean and efficient pressurized air at any point to ensure safe and effective plant operations.

For a leading manufacturer of quick couplings, sound production and processes revolve around having access to a continuous supply of compressed air. If a compressor were to malfunction, operations on the plant floor would be greatly impacted, leading to equipment downtime, lost production and missed revenue. Rather than be reactionary, this manufacturer wanted to be proactive and monitor the performance of its compressor with the ability to identify and resolve underlying issues before they escalated into serious problems.

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.

Voice of the Machine™ Cloud Software 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.

The Solution

The manufacturer employed a condition monitoring solution to monitor the health, performance and status of the compressor. Parker's SensoNODE™ Gold Sensors were applied throughout the machine to record and measure specific parameters, including pressure, temperature and vibration, without having to interrupt production. Utilizing the wireless sensors with Voice of the Machine™ Cloud Software, workers could view and analyze data in real time on any Internet-connected device.

Data revealed a temperature anomaly affecting the compressors' pressure stability that otherwise would have gone undetected. SensoNODE Gold Sensors and Voice of the Machine Cloud Software revealed the compressor ran an extra long cycle to satisfy the growing demand of its services, causing a rise in warmer than ambient temperature air and thus increasing pressure.



Success Factors

SensoNODE Gold Sensors are easy to attach and remove, and can be fitted in the most hard-to-reach areas of machinery and equipment.

Record specific parameters and access the most accurate measurements through Voice of the Machine Cloud Software.

Eliminate equipment downtime, lost production and missed revenue opportunities.

Customer Value

SensoNODE Gold Sensors and Voice of the Machine Cloud Software brought to light irregularities with temperature and pressure points that would have gone unnoticed until developing into a serious problem. By implementing a condition monitoring solution, workers can monitor assets in real time and access data history to ensure operations are running effectively and determine appropriate measures if optimal performance is not met.



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