

Success Story

High Pressure Coolant Lines

The Problem

High-pressure cooling is becoming a common part of industrial machining. And while its benefits are many, the collapse and subsequent crushing of the reservoir's intake filter is a frequent issue. This results in unpredicted downtime and added labor and inventory costs.

The prevailing theory is that during operation, metal chips and other contaminants from the machining process clog the filter, creating a vacuum between it and the pump. With intake flowing at least 1,000 psi, the vacuum crushes the filter.

The Solution

Parker's solution was to install a SensoNODE™ Blue pressure sensor between the pump and the filter to create a baseline data feed of the pressure in the coolant line. Using the Voice of the Machine™ Industrial Mobile App to monitor the sensor's reading periodically allowed maintenance staff to notice pressure spikes, indicating potential blockage, and predict filter maintenance requirements.



SensoNODE™ Blue is Parker's series of Bluetooth-powered sensors. Compact, energy-efficient, and wireless, they are designed to provide simple and useful solutions for diagnostic and condition monitoring applications. SensoNODE monitors assets to help predict problems and prevent downtime, and delivers the information to your mobile device.

Voice of the Machine™ Industrial Mobile App gives access to machine and process measurements right on your mobile device. The user-friendly 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 email.

Success Factors

Direct, accurate monitoring of specific point of failure with immediate or historic data trends.

Advanced condition monitoring to identify and resolve issues before they escalate into problems that lead to downtime.

When used with the Voice of the Machine Industrial Mobile App, user-defined alarms warn of dramatic pressure drops or spikes with alerts appearing on a user's mobile device.

Customer Value

Allows maintenance staff to address intake filter clogs before they result in downtime, saving companies the associated labor and inventory costs, as well as lost revenue.



Parker Hannifin Corporation | **Quick Coupling Division**
8145 Lewis Road, Minneapolis, MN 55427

parker.com/conditionmonitoring