Success Story

Monitoring Pressure for Injection Molding in Automotive Market

The Problem

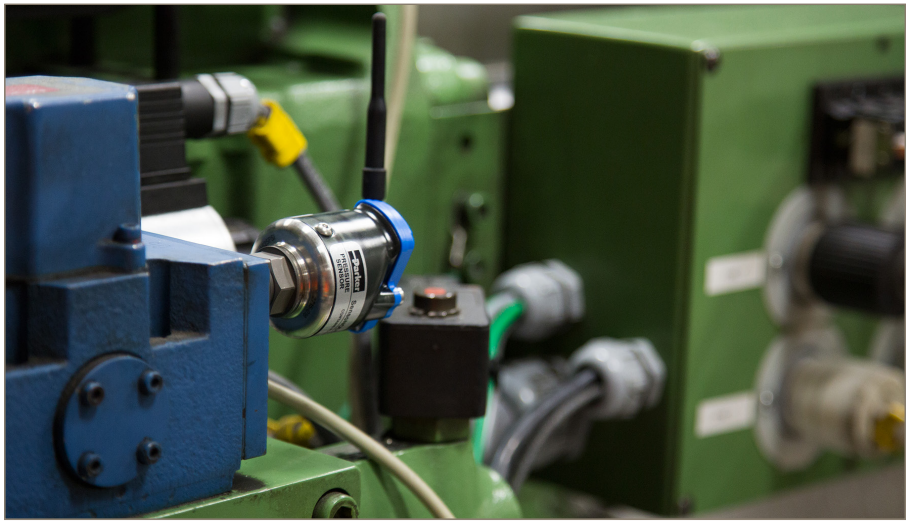
A tier-one automotive injection molding facility that produces gas tanks, wheel wells, and other plastic parts for some major automobile manufacturers, needed a better solution for monitoring pressure changes with its injection molding machines. They were experiencing sudden spikes and drops in pressure, but didn't know where they were coming from along the production line.

The customer had been using wired pressure gauges and pressure hoses to manually test points of interest periodically. Testing wasn't consistent enough to determine when and where the spikes and drops in pressure were happening.

Maintenance technicians also needed to run tests in hard-to-reach areas within the machine. Because the manual monitoring devices required long cables and wires to connect to the sensors, this prevented technicians from being able to perform diagnostics while running the injection molding machines.

The Solution

Installing SensoNODE™ Blue sensors at critical points on five injection molding machines allowed maintenance technicians to consistently monitor pressure levels throughout the day. They found that spikes occurred two or three times hourly, each about five minutes in length. Using SCOUT™ Mobile software to chart graphs of the data, technicians are now able to determine the causes of the fluctuations, and respond to them before they lead to equipment failure.



Success Factors	Customer Value
Wireless sensors made diagnostics easier to perform, allowing for increased frequency and quicker identification of issues.	By allowing all maintenance technicians to download SCOUT Mobile to their phones, multiple people can respond to an alarm as needed. Technicians can also monitor pressure levels on the spot no matter where they are in the facility. As an added bonus, SensoNODE Blue pressure sensors also scan for temperature, allowing technicians to monitor the temperature of the hydraulic fluid running inside the machine.
Small sensors with flexible antennae allow technicians to fit them in hard-to-reach areas of the machines.	
Can perform diagnostics while the machine is running, reducing diagnostic time without interrupting production.	
When used with SCOUT Mobile, user-defined alarms warn of dramatic pressure drops or spikes with alerts appearing on a user's mobile device.	

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.

SCOUT™ Mobile software 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.

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