

# Success Story

## Monitoring Pressure of Chemical Mixing Equipment for the Oil and Gas Industry

### The Problem

A customer develops on-site equipment that mixes chemicals for down-hole applications in the oil and gas industry. Depending on the application, end-users mix three to four chemicals that are pumped into holes at drill sites. Chemicals are mixed to meet certain requirements in the field.

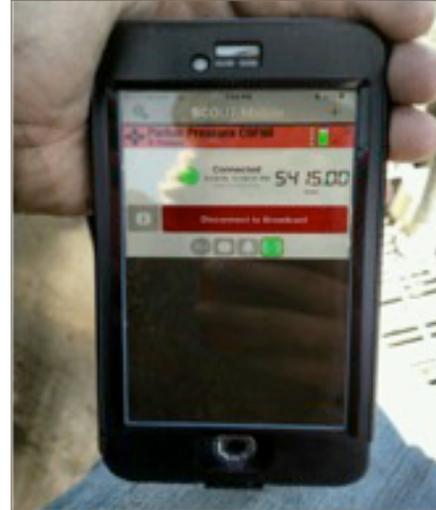
To ensure that the proper amounts of each chemical are mixed, the end-user must be able to measure the pressure levels. The customer had been using wired gauges that required a power source. This required a worker be at the drilling site reading gauges. With chemicals under pressure as high as 7,000 to 8,000 psi, this created a significant safety issue. The customer needed a way to monitor pressure levels accurately out of the potentially dangerous area from a safe distance.

**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.

### The Solution

The customer ported a two-inch high-pressure flow device to the equipment and installed three SensoNODE™ Blue pressure sensors at key points on the equipment. Using the Voice of the Machine™ Industrial Mobile App installed on his iPhone, the customer is able to track and record pressure levels from a safe distance.



Success Factors	Customer Value
Direct, accurate monitoring of pressure with immediate or historic data trends.	By replacing the difficult-to-use wired diagnostic devices that were used prior to SensoNODE sensors and Voice of the Machine™ Industrial software, the end-user is exploring other ways to make the chemical mixing process faster, stronger, and safer.
Wireless, Bluetooth-powered sensors allow for remote monitoring.	
Advanced condition monitoring to identify and resolve issues before they escalate into problems that lead to downtime.	
When used with Voice of the Machine Industrial Mobile App, user-defined alarms warn of dramatic pressure drops or spikes.	



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