## **Application Note**





## Product 800 Series Pressure Transmitter Application Monitoring Pump Performance Industry General

- **Challenge** Pumps are an essential apparatus for the vast majority of industrial applications and their correct operation is vital for process efficiency. Severe equipment damage can occur if the pressure applied to, or discharged from, a pump is not within the design constraints. Additionally, a malfunctioning pump can lead to unnecessary downtime for maintenance or in the worst case scenario, an emergency shutdown of the process.
  - **Solution** The 800 Series Pressure Transmitters from SOR can be used to monitor both the pump suction and pump discharge pressures. With measuring ranges available from 0-5 psi up to 0-30,000 psi, the 800 Series Transmitters are well suited for the vast majority of pump sizes and types. The continuous output of the 800 Series Transmitters can be utilized to trigger alarms if the pressure exceeds or falls below the normal operating conditions. What's more, by monitoring both the pump suction and discharge pressures, plant personnel can use the collected data to better pinpoint and diagnose variations in pump performance.

In the case of pressure loss at pump suction, this indicates the process media is not reaching the pump intake. On the other hand, if pressure is being sensed at pump suction a loss of pressure at the pump discharge indicates the pump has failed. If either transmitter detects a loss of pressure, this indicates an absence of process media on the corresponding side of the pump. Similarly, pressure build-up may indicate a problem with the pump or with the process. The data collected from both transmitters can be reviewed by plant personnel to evaluate the pump's performance and determine whether actions need to be taken to improve the pump's efficiency.