

Chesterton Connect™ Sensor/Cloud Helps Identify Root Failure Point for Split Case Pump

Educational Facilities Chesterton Connect Case Study 003

Challenge

Background

The utilities plant at a large university was trying to resolve frequent premature failures with a split case pump. They speculated that an inadequate sealing device was the cause of the problem.



Chesterton Connect sensor connected to split case pump.

Solution

Product

Two Chesterton Connect™ smart sensors were installed to monitor pump and mechanical seal conditions (vibration, process pressure, and temperature). Within days of being installed, the sensor recorded spikes in vibration and pressure fluctuations in the middle of the night while no one was at the plant.

Upon review of the Chesterton Connect Cloud graphed measurements, the incident was tied to a malfunctioning valve. The problem was addressed immediately, allowing the pump to return to normal operating conditions.

Process Pressure Chesterton Connect Cloud view

Results

Using the Chesterton Connect smart sensor and Cloud analytics, the plant was able to identify the specific issue causing the problem. Thanks to Chesterton Connect, the plant saved \$6,500 in spare parts alone, not including major savings from avoiding downtime and the associated labor cost.

Utilizing the Chesterton Connect Cloud, a specialist has been watching the trends of other Chesterton Connect sensors installed on equipment throughout the plant, identifying similar issues, and helping the plant avoid other pump failures. Plant leadership is now selecting additional equipment to be monitored with the Chesterton Connect smart sensor.



Chesterton Connect Cloud allows you to monitor equipment from your desktop.

of pump's process pressure.