Chesterton 1510 Seal and Connect Monitoring Increase MTBR

Pulp and Paper Industry
Chesterton 1510 Seal and Connect Monitoring
Equipment Monitoring Case Study

Challenge

Background

A large pulp and paper mill experienced challenges with white water pumps transferring pulp at 1.5% consistency from the couch pit. The pumps were previously equipped with a dual seal, but MTBR was still no more than a few months. The pumps runs at a pressure of 3 barg (43.5 psig) and at a temperature of 65˚C (149˚F).

Solution

Product

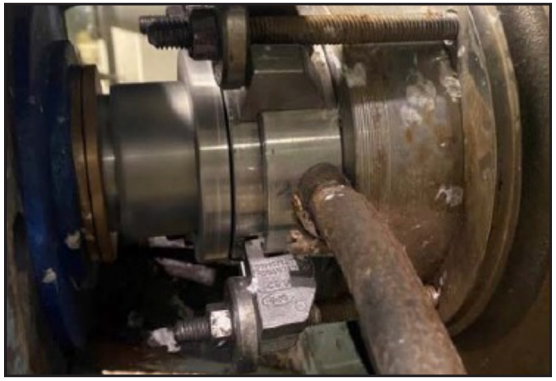
A **Chesterton® 1510 Single Cartridge Seal** installed to replace the original double seal with a small flush. To monitor the seal and pump operation, a **Chesterton® Connect™ Sensor** was installed to measure discharge pressure, temperature, and equipment vibrations.

Results

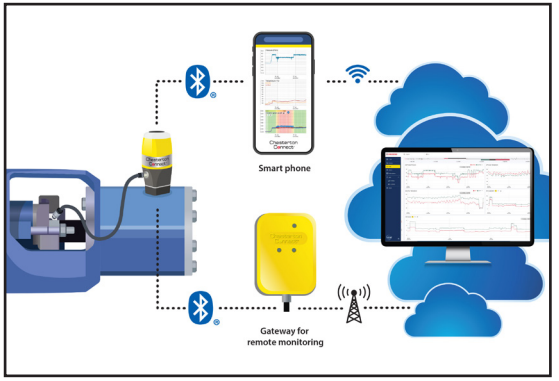
Increased Reliability

The Chesterton 1510 Seal ran reliably for the first three months at which point the seal failed. The **Chesterton Connect Sensor** data showed that failure was due to current operating procedures starting against a closed valve. The customer was able to address this issue in the procedures to avoid future failures and plans to install more **1510 Seals** with **Chesterton Connect Sensor**—to monitor all seals.

Chesterton Connect Sensor monitoring discharge pressure and bearing temperature.



Chesterton 1510 Cartridge Seal installed on a centrifugal pump.



Chesterton Connect System provides 24/7 seal monitoring through the Connect Cloud.

A.W. Chesterton Company
860 Salem Street, Groveland, MA 01834 USA

CHESTERTON.COM

EN601528
09/23