

# **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<sup>®</sup> 1510 Single Cartridge Seal installed to replace the original double seal with a small flush. To monitor the seal and pump operation, a Chesterton<sup>®</sup> Connect<sup>™</sup> 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.

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