

Challenge

Background

A1-year-old self-priming pump in an industrial storm water application failed catastrophically. High vibration and seal leakage was observed during the failure. Cavitation was suspected as the cause of the vibration. Evidence was found upon pump inspection as the cast iron impeller eye was damaged.



Damaged pump.

Solution

Product

The pump was completely overhauled with **Chesterton® ARC 5 and ARC SD4i** coatings on the existing casing, CD4 impeller, **30K Advanced Lip Seals**, and **630 SCXF High Performance Grease** for exceptional bearing protection.

The pump was then reinstalled along with a **Chesterton Connect™ Sensor** to monitor vibration and suction pressure to avoid cavitation. A minimum liquid level in the cellar was discovered and raised.



Chesterton product group: Chesterton Connect Sensor, ARC 5 and ARC SD4i coatings, 30K seal and 630 SCXF grease.

Results

Improved Productivity

The **Chesterton Connect Sensor** helped the customer identify issues, make changes, and monitor pump and system health along the way. In the two-year period following installation, the pump continued to run smoothly with minimal seal and vibration issues.

ARC 5 and ARC SD4i helped the customer save \$2,000 compared to a new casing and added much-needed erosion and corrosion resistance to the iron casing.

30K and 360 SCXF provided increased dirt and water protection for the bearing.

\$ = US Dollar



Chesterton Connect Sensor.