

Chesterton 442C Cartridge Split Seals Switch Results in Easy Installation

Water and Wastewater
Chesterton 442C
Case Study 039 Rotating Equipment

Challenge

Background

A water plant for a Canadian town needed a more reliable sealing solution for four potable (lake) water pumps. The plant was using a competitor's double seal with oil lubrication that had a system cost of \$60,000 US. The seal experienced leakage issues and because it was lubricated with oil, there were serious environmental concerns about oil leaking into the potable water supply.

Solution

Product

The double seals were replaced with Chesterton 442C Cartridge Split Seals with a restriction ring. The 442C was selected because of its simple set up (no pump dismantling); because it had no lubrication system and thereby eliminated the environmental worries; and was easy to replace.

Results

ROI

If the split seal option had been selected from the start, the plant would have saved over \$60,000 US. While the double seals had required 48 hours to install, the Chesterton split seals were installed in only two hours.

The seal replacement labor comparison:

Double Seals vs. Split Seals 48 man hours vs. 2 man hours



The double seal solution was not effective and posed environmental issues.



The 442C Split Seal was installed very simply.



The 442C Split Seal completed installation.