

Challenge

Background

Servo motor cylinders at a hydropower plant were leaking—leading to inconsistent performance, unplanned maintenance, and environmental concerns.

Root Cause

OEM rubber U-cup seals had to be replaced regularly a maximum of every two years on all servo motor cylinders (controlling the wicket gates) which resulted in lost production.

Customer has an immediate need to replace seals in the shortest possible timeframe.



Servo motor cylinders being rebuilt.

Solution

Service

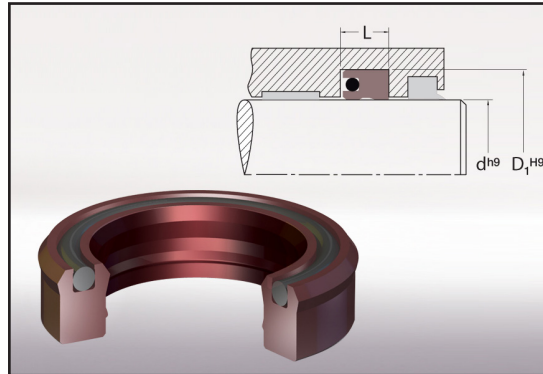
- SpeedSeal capabilities manufactured and supplied all seals within days

Product

- Chesterton 22KE single continuous U-cup incorporates an energizer for increased pre-load while providing added stability during operation

Material

- AWC 800, a proprietary thermoset polymer, which provides excellent abrasion and hydrolysis resistance



Chesterton R22KE - Unique lip geometry stabilizes seal to prevent rolling, o-ring increases pre-load and negative rake profile eases installation.

Results

Improved Performance & Reliability

- The Chesterton sealing solution extended the rebuild cycle from 2 years to 5 years
- This success enabled the customer to maintain Servo motor cylinder operations 24/7/365
- Eliminated environmental and safety concerns on this equipment while improving equipment efficiencies

MTBR: 2.5x



Servo motor rebuilt with Chesterton 22KE seal design made from AWC 800 polymer.