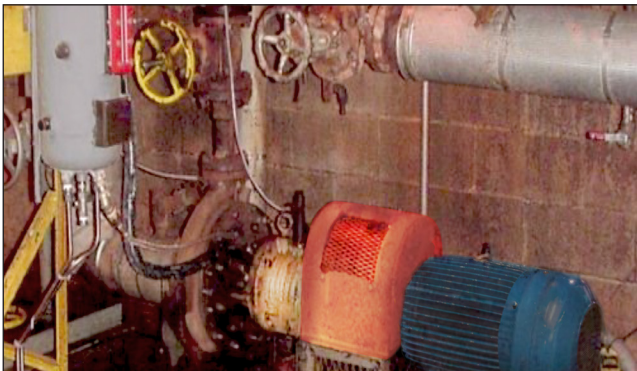


# CHESTERTON SOLUTIONS FOR HOT CONDENSATE PUMPS

## CHESTERTON® 1810H – HYDROPAD SEAL

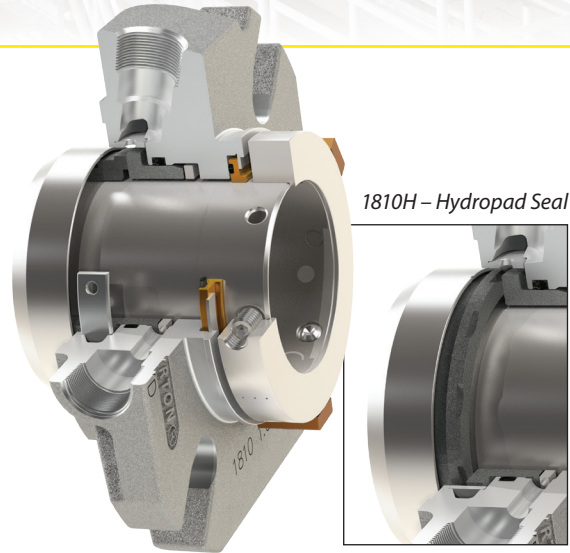
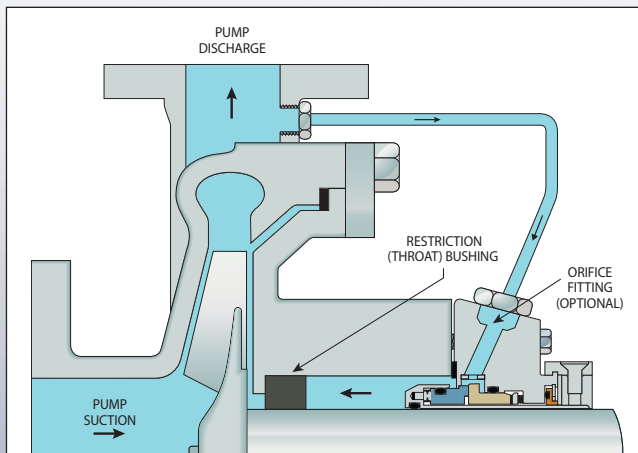
### The Challenge

In a large paper mill, a double mechanical seal with a convection tank and cooling coil was being used to seal a separator condensate pump. Steam flashed across the seal faces, which caused damage and eventual seal failure. This seal arrangement was not successful and required seal change outs every few months.



Pump speed (rpm): 1750; fluid temperature: 148°C – 176°C (300°F – 350°F)

Condensate return pumps are a difficult sealing application due to high temperatures, flashing conditions, and a lack of available cooling options. This paper mill was not able to supply consistent cooling capability.



### The Solution

Chesterton recommended the 1810H – Hydropad Seal with a Plan 11 Discharge Recirculation piping plan for the application because of flashing and the ineffectiveness of the existing external cooling in preventing seal face distortion.

#### 1810H - Hydropad Seal Geometry Enhances Face Lubricity

The 1810H – Hydropad Seal uses advanced face technology, which increases fluid film formation between the seal faces and enhances face lubricity. The increased film formation between the faces reduces heat generation and helps increase the life of the seal.

#### Problems with Cooling Systems?

External cooling of sealing systems is a common method to enhance seal reliability. However, where cooling is suspect or where cooling is not adequate, the use of Hydropad Seal technology can improve seal reliability.

#### Increased Mean Time Between Failures

This paper mill improved their seal longevity from months to years by switching to the Chesterton 1810H – Hydropad Seal.

### 1810H – Hydropad Seal Benefits

- Reduce flush water usage.
- Increased seal reliability due to improved seal face lubricity in hot applications.
- Ideal for use where external cooling is limited or unavailable.
- Compact design for easy and reliable installation.



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- Over 1200 trained local Service Specialists and Technicians

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Form No. EN601857  
1810H – Hydropad Seal  
Sales Sheet  
02/24