

## Challenge

### Background

A large manufacturer of aluminum extrusion products experienced excessive leakage on the main ram of their presses leading to unplanned downtime and lost production.

- The OEM stacked rubber seal sets had to be constantly readjusted and lasted an average of only 2 months between replacements
- The unplanned maintenance required three men to rebuild over a 6-hour period, leaving production at a standstill

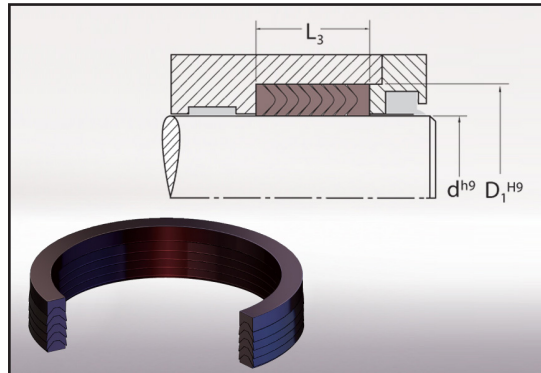


Extrusion Equipment - 950 x 1000 mm (~37 x 40")  
Pressure - 400 bar (5800 psi)  
Oil Temperature - 50° C (122 F°)

## Solution

### Recommendation

- A sealing upgrade to a **Chesterton 27K** stacked set made from proprietary thermoset polymer (**AWC 800**) offers excellent wear and tear characteristics
- This pressure-sensitive, single-acting stacked set with a positive rake design provides optimum operating performance
- Unlike conventional stacked sets, this design contacts through the center of the set to ensure even loading with minimal gland pressure-leading to longer seal life and improved equipment performance



Chesterton 27K split-stacked, pressure-sensitive v-ring set. Made from the Chesterton 800 thermoset polymer.

## Results

### Improved Performance & Reliability

- Eliminated ram leakage and constant packing adjustments
- Dramatically improved reliability

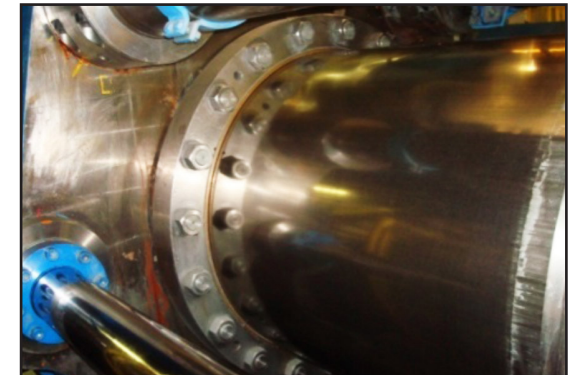
**MTBR improvements: 8X**

### Savings

- \*Savings in first 18 months (labor and rebuild): **\$7,500**
- Production stand stills ended
- Plant productivity improved

*\*Does not include cost of lost productivity*

\$=USD



Main ram upgraded with the Chesterton 27K design operating leak-free.