Multi-Daylight Press Solution

Chesterton Fluid Power Equipment Sealing Solutions

Wood-Based Panel Chesterton 11K Case Study 009 FP

Challenge

Issue

Challenged by a particleboard manufacturer to increase MTBR of the hydraulic sealing system on a large up-stroke particleboard press.

Root Cause

Existing OEM reinforced stacked rubber sets lasted an average of 15 months before excessive leakage required press shutdown and the cylinders to be repacked.

Goal

Provide a reliable sealing solution that increases MTBR, eliminates the need to adjust packing sets, and decreases downtime during maintenance repairs.



Split seal design with the wipers protecting the hydraulic system.

Solution

Recommendation

 The split Chesterton 11K EZ Stack Pack design eliminated the need to completely disassembly the equipment cutting installation time in half versus conventional stacked designs

Material

- Dual material combination enables usage against slightly worn equipment (AWC 800/ AWC 805) eliminating leakage
- Solution included a wiper, anti-extrusion ring, and seal spacer to block contaminants, and minimize extrusion and movement of the seal set while in operation

Why use the Chesterton's two-piece, split stacked set 11K?

- Patented split design eliminates the need to disassemble equipment and requires no shimming
- Dual material combination works on both new and worn equipment
- Negative rake lip profile eases installation and optimizes seal performance

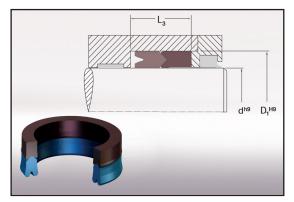
Results

Improved Performance & Reliability

- Improved reliability and production
- Reduced downtime and maintenance costs
- Easy installation and quick repair
- Maintenance free; no gland adjustments

MTBR improvements: 5X

Of the 12 main cylinders, 8 sets were still in operation after 6 years with the Chesterton sealing sets.



Patented Chesterton 11K split design