

Hot Forming Press

Chesterton Fluid Power Equipment Sealing Solutions

Automotive Chesterton 20K & 19K Case Study 007 FP

Challenge

Issue

A major supplier to a number of automobile manufacturers was having difficulty with the performance of the main press used in their production line.

Root Cause

The primary piston seals rolled in the grooves during operation leading to premature failure.

Goal

Eliminate leakage, reduce downtime, and improve production.

Solution

Recommendation

A unique sealing solution combined a heavyduty, bi-directional **Chesterton 20K** with a **19K** split replaceable bearing band.

Products & Materials

- 20K: Unique thermoset material, (AWC 800) offers excellent wear and tear resistance
- 19K: 40% glass-filled nylon (AWC 660) eliminates metal-to-metal contacts and offers similar carrying load as bronze

Results

Improved Performance & Reliability

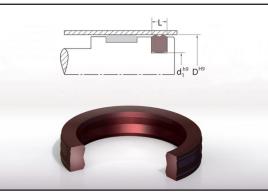
This sealing solution eliminated leakage of the cylinders on the main press and minimized scoring of the piston barrel and rod.

- Improved reliability
- Eliminated leakage
- Reduced downtime
- Improved production

MTBR improvements: 28X



Main hot forming press and close up of damaged seals (size - 230 mm bore).



Double-acting, high-pressure hydraulic applications



Modified piston design.

Technical data reflects results of laboratory tests and is intended to indicate general characteristics only. A.W. Chesterton Company disclaims all warranties expressed or implied, including warranties of merchantability and fitness for a particular purpose. Liability, if any, is limited to product replacement only. Any images contained herein are for general illustrative or aesthetic purposes only and are not intended to convey any instructional, safety, handling or usage information or advice respecting any product or equipment. Please refer to relevant Safety Data Sheets, Product Data Sheets, and/or Product Labels for safe use, storage, handling, and disposal of products, or consult with your local Chesterton safer spresentative.

A.W. Chesterton Company 860 Salem Street, Groveland, MA 01834 USA

© A.W. Chesterton Company, 2014. All rights reserved. ® Registered trademark owned and licensed by A.W. Chesterton Company

in USA and other countries, unless otherwise noted. WWW.CHESTERTONFLUIDPOWER.COM

EN23699 Source: 013 03/15