

UK MANUFACTURER SECURED 80% MAINTENANCE COST REDUCTION BY UPGRADING LUBRICANTS AND LUBRICANT MANAGEMENT PRACTICES

The Challenge:

UK manufacturer, Jubilee® Clips Ltd, has been producing the Jubilee® brand clamp, the standardised brand name for worm-drive hose clamps since 1921 - ever since it held the first patent. The company has continued to manufacture these and other Jubilee® products in Great Britain for global suppliers ever since.

Faced with increasing order volumes, a pressing skills shortage and the potential implications of Brexit, Jubilee® Clips like the rest of the UK manufacturing industry, is going through a period of rapid change.

Jubilee® Clips was looking to enhance the efficiency of its operations as it was experiencing very short oil drainage intervals (ODI) of its hydraulic pressure packs. As a result, regular maintenance was having to be scheduled to drain the oil every six months, affecting productivity as well as incurring costs for the disposal of the waste oil. The company also noted a drop in hydraulic pressure during summer months, when hydraulic power packs run hotter than usual.

In need of a solution to prevent rising costs and equipment downtime, Jubilee® Clips sought advice from expert partner and Shell distributor, Certas Energy Lubricants, to identify the most appropriate lubricants and maintenance cycles available.

The Problem

Jubilee® Clips' production process for the hose clip housings utilises 12 hydraulic power packs that run 24 presses. A reliable operation of the presses is essential to avoid any disruption to tight production schedules. However, the short six month ODI required the business to schedule in extra down time to carry out the oil changes and also incur additional costs of new filters each time and a new pump every 12 months. There was also extra costs associated with the disposal of the waste oil.

After assessing the company's operations, Certas Energy Lubricants identified that the poor thermal stability of the existing oil was unable to cope with the higher operating temperatures of the hydraulic power packs during the warmer summer months. Resulting in a drop in hydraulic pressure and further disrupting the production schedule.

The Solution

Certas Energy Lubricants technical experts recommended that the company should use a high performance hydraulic fluid, such as Shell Tellus S2 VX 46, as this would offer improved viscosity control under both severe mechanical stress while still maintaining performance across a wide range of temperatures, when compared to ISO HM fluids.

It became evident in operation that Jubilee® Clips was able to extend the maintenance interval beyond six months as Shell Tellus S2 VX 46 resisted thermal and chemical breakdown previously experienced, therefore minimising sludge formation and improving system cleanliness. With its excellent oil cleanliness particle count, Shell Tellus S2 VX 46 fluids also help reduce the impact of contaminants on filter blocking, allowing both extended filter life and enhancing equipment protection.

The results:

After using Tellus S2 VX 46, Jubilee® Clips saw a significant improvement in equipment performance and reliability.

- The ODI rate for the power packs increased from 6 to 24 months
- Cost reduction of 78% across maintenance costs as savings made on the amount of hours it required to maintain and change the oil, new parts such as filters and the actual cost of oil
- Jubilee® Clips also reported that its equipment no longer experienced any downtime caused by high running temperatures, due to the excellent thermal stability provided by Shell Tellus S2 V (X) 46.

Ian Jennings, Managing Director at Jubilee® Clips commented: *"The team at Certas Energy Lubricants really demonstrated their sector and product knowledge and delivered a solution they were confident we were going to see some immediate results from. They fulfilled their promise and the tailored solution they provided has in just 12 months saved us close to £4,000, made operations run more effectively and we've even seen an uplift in quality standards as a result of us being more confident in the performance of the machinery."*

Shell Tellus S2VX fluids are high performance hydraulic fluids that provide outstanding protection and performance across a wide range of temperatures. They resist breakdown under heat and mechanical stress, and are ideally suited to most mobile equipment and other applications subject to a wider range of ambient or operating temperatures. Shell Tellus S2VX fluids meet the latest Bosch Rexroth Fluid Rating RDE 90245.

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