DOUBLE OIL CHANGE PERIOD

INDUSTRY:
equipment manufacturing

APPLICATION:
plastic injection-moulding machine

PRODUCT:
MOL Hydro HM 46 AL ashless hydraulic fluid

SERVICE:
LubCheck* Oil and Machine Diagnostics, hydraulic oil development

This manufacturer offers complete solutions to electricity distributors including machinery and integrated equipment that ensure safe and reliable operations for their customers. In its production process the company uses high performance equipment which cannot be shut down without production loss and sometimes significant maintenance costs. To extend the service life of this equipment, MOL-LUB experts have developed a new ashless hydraulic fluid and recommended regular oil diagnostic tests. This has resulted in minimized wear and tear in the equipment's' hydraulic systems and doubled the length of oil change periods, leading to significant cost savings.

The products manufactured consist of a wide range of low and medium voltage equipment such as modular equipment, communal distributors, industrial switches, control equipment, distribution boards, assembled power distributor systems as well as other electric assembly components and accessories.

To increase the performance of hydraulic equipment used in the company's plant, a cleaner hydraulic fluid with increased service life was needed. This had to be provided for hydraulic systems under intense thermal load without increasing technical risks. MOL-LUB experts' answer was the development of an ashless hydraulic fluid line based on a new additive concept.

Application of the new MOL Hydro HM 46 AL ashless hydraulic fluid, with an ash producing component (zinc and calcium free), ISO-L-HM performance-level additive caused the length of oil-change periods to almost double. In addition, thanks to its higher thermal stability, the oil's sludge-forming characteristics improved, resulting in cleaner in-process working fluid. Based on MOL-LUB experts' experience, this product can generally be used without problems for 20,000 working hours provided particular attention is paid to regular oil checks and maintenance required by the equipment manufacturer. Based on oil diagnostics results, with expert maintenance of the equipment and the oils being used, significant improvement in hydraulic systems' service life can be expected.

* At the time of the case study the name of our Oil- and machine diagnostics service was called „WearCheck", which changed to "LubCheck" in 2017.

1 CHALLENGE

Increasing service life of hydraulic equipment and its oil requirements

2 SOLUTION

Application of a new ashless hydraulic fluid that provides longer service life and introduction of LubCheck Oil and Machine Diagnostics to monitor equipment status.

3 RESULTS

Using the recommended product and service, the oil change period of the equipment doubled resulting in significant annual cost savings.

LUBCHECK OIL AND MACHINE CONDITION MONITORING

LubCheck diagnostics is the world's leading lubricant-analysis process, which helps to precisely identify the degree of lubricant ageing, degradation and any kind of damage to machines well before its consequences might cause significant losses in production and lead to high repair costs.

STATE-OF-THE-ART LABORATORY

As a pioneer in oil diagnostics and machine condition-monitoring in Central Europe, MOL-LUB Ltd. has been operating a state-of-the art oil testing laboratory for 15 years. The accredited laboratory is a specialist member of LubCheck International and analyses and evaluates several thousand oil samples every year, thus saving its customers significant amounts of money and ensuring more efficient production scheduling.

LUBCHECK DIAGNOSTICS IN 4 SIMPLE STEPS

Sampling	Forwarding samples	Analysis	Expert opinion
Please follow the process described in the attached Information booklet to ensure proper sampling!	Following sampling, please fill in the attached form, and forward the oil sample vessel to the MOL-LUB Ltd. LubCheck laboratory!	The samples received are analysed and a diagnosis is made by lubrication engineering experts.	Test results are summarised within 72 hours and the partner receives an e-mail describing any likely problems and effective preventive maintenance actions to be taken.

WITH THE HELP OF LUBCHECK DIAGNOSTICS

- potential breakdowns can be recognised and identified at an early stage
- any hidden depreciation and irregular operation of machines can be identified and tested
- production losses can be reduced or eliminated
- machine repair costs can be reduced
- maintenance will be more precise and easier to plan
- machine oil change intervals can be optimised
- machine reliability can be improved

INDICATORS ARE IMPROVING

- more efficient production scheduling
- optimised lubrication
- significant financial savings
- easy-to-plan maintenance costs

YOUR PARTNER