

INDUSTRY: aluminium industry

APPLICATION: band casting equipment

PRODUCT: Lubrication Engineers® LE 1604 DUOLEC gear oil

SUPPLIER: MOL-LUB Ltd.

SERVICE: WearCheck oil and machine diagnostics



# INCREASED EQUIPMENT RELIABILITY, DECREASED COSTS

In industrial operations even one hour's downtime can cause very significant losses. This can be prevented by continuous supervision and expert maintenance. This aluminium product manufacturer, one of the leading companies in Hungary, has experienced a failure in their band casting equipment, which led to serious production losses and financial disadvantage. To avoid further losses MOL-LUB Ltd. suggested using a top performance industrial gear oil and applying regular oil and machine diagnostic tests.

The aluminium product manufacturer has decades of experience and supplies a wide range of aluminium semi-manufactured products. Their band casting equipment had been operating faultlessly for 8 years. Using general industrial gear oil and maintenance specified by the equipment manufacturer, the machine was operating 300 days per year producing 12 tons per day. In 2010, however, there was a breakdown. Unexpectedly, the gears were blunted and due to extreme friction and heat the gear oil was totally degraded. This failure meant 5 weeks' downtime and EUR 35,000 in maintenance costs for the company.

To avoid further downtime and maintenance costs, MOL-LUB lubrication experts suggested optimising lubricants and using regular WearCheck Oil and Machine Diagnostics. This increasingly popular method monitors equipment deterioration so that possible breakdowns can be prevented. In addition, servicing costs are negligible compared to the costs of potential damage.

With the help of tests carried out by MOL-LUB, lubricant usage has been optimised and the lubricating system adjusted accordingly. For the restart, MOL-LUB experts suggested using top performance LE 1604 DUOLEC gear oil containing special anti-wear and EP additives, which has successfully proved itself in several industrial applications. With this type of oil, oil change periods have been increased by 100%.



# CHALLENGE

Preventing production losses and significant maintenance costs and optimising lubricant use.



Application of a high performance industrial gear oil and WearCheck Oil and Machinery Diagnostics.

# RESULTS

Increased equipment reliability with further failures and production losses becoming preventable.

# WEARCHECK OIL AND MACHINE CONDITION MONITORING

WearCheck 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 WearCheck 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.

# WEARCHECK DIAGNOSTICS IN 4 SIMPLE STEPS

#### **TAKING SAMPLES**

Please follow the process described in the attached Information booklet to ensure proper sampling!

#### FORWARDING SAMPLES

Following sampling, please fill in the attached form, and forward the oil sample vessel to the MOL-LUB Ltd. WearCheck laboratory!

## ANALYSIS

The samples received are analysed and a diagnosis is made by lubrication engineering experts.



#### **EXPERT OPINION**

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 WEARCHECK 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



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