FRUITFUL DECISION SAVES EUR 564,000!

INDUSTRY:
passenger transport

APPLICATION:
heavy duty vehicle

SERVICE:
WearCheck oil
and machine diagnostics

Our client is a big transportation company, operating over 1,000 vehicles which travel nearly 78 million kilometres a year. Unsurprisingly, daily breakdowns had become common, so continuous monitoring, problem identification and prevention were extremely important issues for the company. To achieve these it decided to use the WearCheck Oil and Machine Diagnostics service provided by MOL-LUB Ltd. The results justified their decision: early problem detection and speedier maintenance resulted in EUR 564,000 in materials and labour cost savings.

Nowadays, service life of the modern passenger car engine is 4-500 thousand kilometres, while in commercial vehicles, with servicing up to complete reconstruction – in optimal operating conditions – it can exceed 1 million kilometres. Significantly increased servicing intervals can now be observed, in the case of passenger cars service cycles are 20–30 thousands kilometres, in the case of heavy duty commercial vehicles in long distance operations they can reach 100–120 thousand kilometres. This decreases the possibility of in-time problem identification and results in significantly higher maintenance costs. The value of vehicle engines and gears and failure-induced maintenance costs make problem identification and forecasting even more necessary. MOL-LUB WearCheck Oil and Machinery Diagnostics service provides a solution to this problem, enabling one to monitor all the positive and negative processes inside the engine by monitoring changes in lubricant characteristics. At our client, two of the most common problems came to light and the tests helped the company to save EUR 564,000 in direct materials and labour costs and significantly increase the service lives of its bus engines.

Detection of abnormal dust entering engines: 87 vehicles	Serious quantities of dust: **36 vehicles**	Prevented engine failures through preventive maintenance: **26**	Direct savings: **EUR 167,740**
	Warning signs: **51 cases**	Number of engine damage occurrences avoided through preventive maintenance: **29**	Direct savings: **EUR 185,484**
Detection of coolant entering engines: 97 vehicles	Serious quantities of coolant: **72 cases**	Number of engine damage occurrences avoided through preventive maintenance: **22**	Direct savings: **EUR 141,935**
	Red flags: **25 cases**	Number of engine damage occurrences avoided through preventive maintenance: **11**	Direct savings: **EUR 69,355**

1 CHALLENGE

Prediction of engine failure, resulting in lower maintenance costs.

2 SOLUTION

WearCheck oil and machine diagnostics.

3 RESULTS

EUR 564,000 in materials and labour cost savings per year.

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 nearly 20 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

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. WearCheck 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 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

YOUR PARTNER