

GREASE ANALYSIS



Grease Analysis

Oil analysis is able to monitor the health of the lubricant, the health of the machine and levels of contamination through a series of chemical and physical tests. However, sometimes it is more beneficial to have a component lubricated by grease.

Grease samples can be submitted to WearCheck in exactly the same way that oil samples are. Ensure that the standard sample bottle is three quarters filled with grease, fill in the submission form and submit in the normal manner.

When the sample arrives in the laboratory the grease is dissolved in a special cocktail of solvents and violently shaken. Any debris present is separated magnetically and the magnetic wear particles are filtered through a standard debris membrane.

The grease sample is then dissolved in the standard laboratory solvent and analysed by the spectrometer for wear metals, contaminants and grease additives. Unfortunately, there is no universal solvent for grease as there is for most oils and it is almost impossible to take a representative sample. This means that spectrometric analysis can be suspect but it does give an idea of what is and is not present. The PQI of the ferrous debris is also measured.

Spectrometric analysis, PQI and debris analysis are then processed in the same manner as an oil sample but a diagnosis is based on debris and contamination only. Physical and chemical properties of the grease require instrumentation not normally used in an oil analysis laboratory. Photographs are taken of any relevant debris and the normal oil analysis report format is used.



Sample of an unused grease that contains very finely-divided aluminium particles that act as a solid lubricant.

Contact Details

South African Offices & Laboratories

Head Office

Unit 4, The Terrace, Westway Office Park,
Westville, KwaZulu-Natal
t : +27 31 700 5460
e : support@wearcheck.co.za

Bloemfontein

Unit B, 4 Milner Road
Waverley
t : +27 51 101 0930
e : support@wearcheck.co.za

Eastern Cape

8 Van Wyk Road,
Westering
t : +27 82 290 6684
e : support@wearcheck.co.za

Gauteng

30 Electron Avenue,
Isando
t : +27 11 392 6322
e : support@wearcheck.co.za

Middelburg & Witbank

Unit 7a Nungu Industrial Park
13 Mandela Drive, Middelburg
t : +27 13 246 2966
e : support@wearcheck.co.za

Northern Cape

20 Kelkiewyn Street,
Kathu, 8446
t : +27 66 474 8628
e : support@wearcheck.co.za

Rustenburg

221A Beyers Naude Street,
Rustenburg, 0299
t : +27 83 938 1410
e : support@wearcheck.co.za

Western Cape

Unit 17, Prosperity Park, 10 Computer Rd,
Montague Gardens, 7441
t : +27 21 001 2100
e : support@wearcheck.co.za

International Offices & Laboratories:

DRC

Kibali Mine
Kibali
t : +260 977 622 287
e : boniface@wearcheck.co.zm

Ghana

Adjacent PanAfrican (Zen Yard),
Akyempin Road, Tarkwa
t : +233 54 431 6512
e : supportgh@wearcheck.com.gh

India

#16-B Kamokoti Nagar Main Road, Palli Karanai,
Chennai, 600 100, Tamilnadu
t : +91 44 4557 5039
e : nissar@wearcheck.co.in

Mozambique

Esquina da EN4 and Mozal Road, Talhão no. 11/15,
Bairro Mussumbuluco, Municipio da Matola
t : + 258 85 792 7933
e : supportmz@wearcheck.co.mz

Namibia

Unit 14, Lafrenz Industrial Park – Erf R/E 26 W,
Rendsburger Street, Windhoek
t : +264 81 141 7205
e : supportna@wearcheck.co.na

UAE – Dubai

Plot 271, Sector 18
AlJarf Area, Ajman
t : +971 6 740 1700
e : operations@wearcheckpm.com

Zambia

Plot 3717, Prescott Road
Light Industrial Area, Kitwe
t : +260 212 210 161
e : supportzm@wearcheck.co.zm

Zimbabwe

23 Amby Drive, Amby,
Harare
t : +263 24 244 6369
e : supportzw@wearcheck.co.zw