Industrial Oil Analysis

Predictive Analysis for Industrial Systems

WEARCHECK INDUSTRIAL OIL ANALYSIS PROVIDES A COMPREHENSIVE VIEW OF THE STATE OF YOUR LUBRICATED EQUIPMENT PROVIDING PEACE-OF-MIND FOR YOUR OPERATION.

OVERVIEW

- Reduction in unscheduled downtime.
- Effective maintenance scheduling.
- Improved equipment reliability.
- Reduction in maintenance costs.
- Maximization of oil change out intervals.
- Minimization of installation errors.
- Reduction in machine power consumption.

BENEFITS

Your primary concern as a business is to be profitable. All too often, these days, this requires an increase in profit through a reduction in costs. A well run condition monitoring program will achieve a substantial reduction in manufacturing costs. WearCheck's oil and wear particle analysis packages offer you condition monitoring for your industrial systems. A plant survey to identify essential and critical machines will allow you to assess your analysis needs. WearCheck offers three levels of analysis, from basic to advanced test kits, to meet your condition monitoring requirements.

WearCheck's oil and wear particle analysis packages cover all three areas of analysis. An assessment of the oil condition reveals whether the system oil is ready to be changed, or if it is fit for further service. Save money by maximizing your oil change out intervals with the confidence that condition monitoring provides. Detection of ingressed contaminants from the manufacturing environment, including process contaminants, dirt, and water alerts you in time to perform filtration service, saving the oil and avoiding unnecessary wear. When the oil condition and contamination is reduced by routine monitoring, system wear will be minimized. WearCheck's analysis can detect subtle changes in the levels of wear metals present in the system oil. Failures due to worn out components can be avoided long before those components are worn out of specification.

A WearCheck Technical Representative will analyse your plant equipment list, and recommend the proper test kits for each machine. WearCheck provides you with clear and concise directions, forms and sample bottles needed to submit samples to the WearCheck laboratory. After you have taken a small sample of oil from the system, simply fill out an information sheet and submit it with your sample to the laboratory.

WearCheck's oil and wear particle analysis is effectively used today for a broad range of systems operating in a wide variety of industries including hydraulic systems, governor systems, gear extruders, natural gas turbines, industrial gear and bearing systems, and refrigeration and other compressors.

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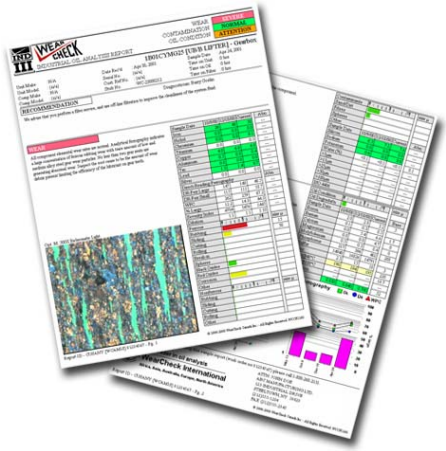
TESTING METHODS

		IND1	IND2	IND3
	**ICP Analysis** ASTM D5185	Determines the parts per million (ppm) of all wear metals (Fe, Cr, Ni, Pb, Cu…), contaminants (Si, Na, K….), and additives (Ca, P, Zn, Mg, Mo…).	●	●	●
	**Viscosity @ 40°C** ASTM D445	Determine the viscosity of the oil at 40°C to determine if oil is still within specification. High viscosity can indicate oxidation, low viscosity can indicate contamination, improper make-up oil.	●	●	●
	**Visual Screen** In-house method	A picture of both the oil color/clarity and the bottom of the sample bottle are taken, and any level of contamination, visual oil problems or visible wear debris of the oil is recorded.	●	●	●
	**AN** ASTM D664	Determines overall acidity of the oil which is an indication of degradation. Single best test to determine change-out interval.		●[2]	●[2]
	**KF** ASTM D6304	Determines level of moisture or water contamination in the oil.		●[2]	●[2]
	**Particle Count** ISO 4406:1999	Determine cleanliness levels of oil. High particle count levels can indicate gross contaminant ingress, wear, filter by-pass or all of these issues.		●[2]	●[2]
	**PQ Index** In-house method	Provide a rapid indication of metallic debris in an oil sample. Detect ferrous wear debris that may be missed by spectrometric analysis.		●[2]	●[2]
	**Analytical Ferrography**	A detailed morphological analysis of the wear debris particles suspended in the oil. A-Ferr can determine the type of wear process and cause of wear in a lubricated system.			●

2 *– The IND2 and IND3 test packages include any two of the additional tests listed.*



WearCheck Industrial Oil Analysis includes everything to set-up a complete oil analysis program. When you purchase a WearCheck Industrial oil analysis program you will receive the necessary sample kits. All WearCheck oil analysis programs include laboratory testing, sample diagnosis and recommendations, sample report, and access to our patented WebCheck™ system to manage your oil analysis program.

WearCheck offers additional programs for mobile equipment, aviation, mining, fuels, coolants and Advanced Oil Monitoring.

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WearCheck USA. 501 Madison Ave., Cary, NC, 27513 **Tel** 919-379-4102 **Toll-free** 1-800-237-1369 **Fax** 919-379-4050 **URL** http://www.wearcheck.com
WearCheck Canada Inc. C8-1175 Appleby Line, Burlington, ON, L7L 5H9 **Tel** 905-569-8600 **Toll-free** 1-800-268-2131 **Fax** 905-569-8605 **URL** http://www.wearcheck.ca

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