Construction Machinery Oil Analysis

Predictive Analysis for Off-Road Machines

Construction Machinery Oil Analysis

THE WEARCHECK CONSTRUCTION OIL & FLUIDS ANALYSIS PROGRAM FULLY INTEGRATES WITH YOUR CMMS TO MAXIMIZE ROI WHILE ENSURING UPTIME FOR YOUR FLEET OF OFF-ROAD MACHINERY.

OVERVIEW

- One sample kit for all your fluid analysis needs (oil, coolant, fuel, DEF)
- ADOAPT API integration with your CMMS.
- Integrated mobile app, QR sample & asset tags.
- Effective maintenance scheduling & optimization of machine PMs.
- Reduction in machine downtime / improved machine reliability.
- Extended machine life.
- Verification of OEM warranty claims.

BENEFITS

Whether you operate construction equipment, or any other type of off-road machinery your fleet represents a large investment, and sometimes the difference between profit and loss depends on keeping operating costs low. Knowledgeable owners understand the benefit of proper maintenance and care of equipment. Through the routine monitoring of the condition of your machines WearCheck offers you a service to aid your maintenance practices. WearCheck's oil analysis service detects abnormal equipment condition before that equipment runs into costly repairs, with time to schedule corrective action. This reduces the cost of your repairs. Problems are caught early, minimizing unscheduled, costly downtime. WearCheck helps you to extend the life of your valuable investment.

WearCheck's Oil Analysis Program only requires you to take a small sample of the oil from each component being monitored. You are provided with clear and concise directions, forms and sample bottles needed to submit samples to the WearCheck laboratory.

After you have taken the sample, you simply fill out an information sheet and submit it with your oil sample to the WearCheck laboratory. Once the sample is received several tests are performed to assess the conditions of the component. Once complete you receive a detailed oil sample report with a concise diagnosis and clear recommendations.

WearCheck provides access to ADOAPT, our industry standard RESTful API that allows you to fully integrate your oil analysis results and program with your CMMS or EAM platform that will automate all the essential oil analysis program tasks to ensure your oil analysis program is both efficient and effective and provides maximum ROI for your oil program budget.

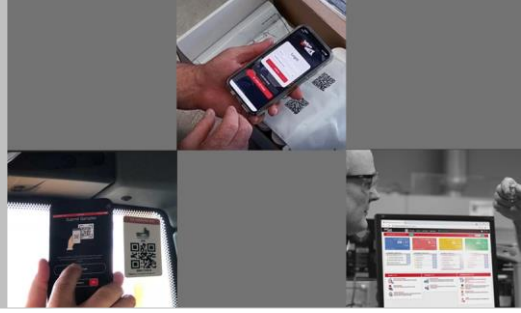
WearCheck's Oil Analysis is being effectively used today for a broad range of mechanical equipment, operating in a wide variety of industries including transport, marine, mining, construction, agriculture and the military.

WEAR CHECK

THE LEADER IN OIL ANALYSIS

Construction Machinery Oil Analysis

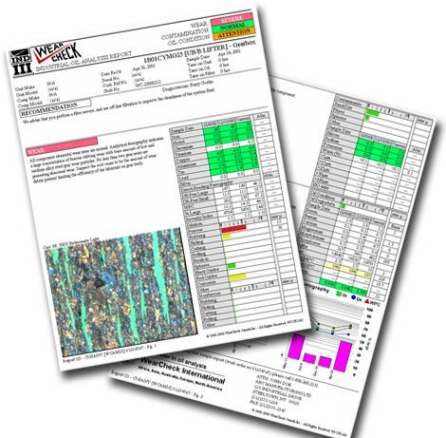
Predictive Analysis for Off-Road Machines



Oil | Coolant | Fuel | DEF

The Construction Analysis program provides one sample kit for all your fluid analysis needs (oil, coolant, fuel, DEF). Visit our web site for a complete list of test methods for all fluids.

Test	Test Method	Description	ENG	HYDR	TRAN	GEAR
	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 ASTM D445/D7279	Determine the viscosity of the oil at 40°C (non-engine), or 100°C (engine) to determine if oil is still within specification. High viscosity can indicate oxidation, low viscosity can indicate contamination, improper make-up oil.	●	●	●	●
	Visual Screen WC 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.	●	●	●	●
	Infra-red Analysis ASTM D7624/D7414,5/D7844	Measures the amount of soot & carbon present in the oil as well as the oils level of oxidation, nitration and sulfation by Fourier-Transform Infra-red.	●			
	Base Number ASTM D2896/D4739/D8321	Determines remaining alkilinity (BN) of the oil which is an indication of degradation. Single best test to determine change-out interval. BN test is for engine oil samples.	●			
	Acid Number ASTM D664/D974/D8045	Determines overall acidity (AN) of the oil which is an indication of degradation. Single best test to determine change-out interval. AN for non-engine oil samples.		●		
	Particle Count ASTM D7647	Determine cleanliness levels of oil to ISO4406:1999. High particle count levels can indicate gross contaminant ingress, wear, filter by-pass or all of these issues.		●		
	PQ Index ASTM D8184	Provide a rapid indication of metallic debris in an oil sample. Detect ferrous wear debris that may be missed by spectrometric analysis.				●



WearCheck Construction Oil Analysis includes everything to set-up a complete Fleet analysis program. When you purchase a WearCheck Fleet Analysis program you will receive our simplified sample kits (QR-coded bottles & sample forms with mailing packs). All WearCheck Construction analysis programs include laboratory testing, sample diagnosis and recommendations, sample report, and access to our patented WebCheck™ system, and companion mobile application to manage your Fleet analysis program.

WearCheck offers additional programs for off-road construction, industrial equipment, aviation, mining, fuels, coolants, filters, transformer fluids, thermal oils and Advanced Oil Monitoring for turbines.

WEAR CHECK

THE LEADER IN OIL ANALYSIS

© 2023 WearCheck. All Rights Reserved. All illustrations, photographs and specifications within this literature are based on the latest service information. Discuss actual service with a local WearCheck agent for complete accuracy. For information on additional options, contact your WearCheck agent. All service and product brand names are WearCheck trademarks.

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