

Analysis	Method	Description	Engine	Gas engine	Industrial	Gears	Grease	Heat transfer	Coolant
Acid Number, TAN	IP 177/ASTM D 664	Specifies the concentration of acidic contaminants in the oil, which shows if the oil is oxidised or contaminated.		x				x	
Appearance	In-house	A visual assessment of the oil's appearance.			x	x			x
Base number, TBN	IP 276/ASTM D 2896	The concentration of alkaline contaminants in the oil, which can neutralise acidic products of combustion.	x	x					
Chlorine ICP	ASTM D 5185	Gives the chlorine content.		x					
Conradson Carbon Residue	ASTM D 189	Gives the carbon residues remaining after the sample has been heated vigorously.						x	
Dispersancy	Blotter spot	Gives the capacity of an engine oil to keep soot particles floating, so they can be separated from the oil when it passes through the oil filter.	x	x					
Elemental Analysis, ICP	ASTM D 5185	Specifies the oil's content of metals from wear, contaminants and additives.	x	x	x	x	x	x	x
Ferrous Debris	PQ	Gives the quantity of magnetic contaminants.			x	x	x		
Flashpoint	Grabner	This test shows whether the oil's flashpoint is higher or lower than expected.						x	
Flashpoint	Hot plate	This test shows whether the oil's flashpoint is higher or lower than expected.	x						
Freezing point	Calculated by refractive index	The temperature at which a liquid changes state to the solid phase.							x
Fuel	GC	Gives the fuel content in the oil.	x						
Glycol content	IR + Na	Gives the glycol content in the oil, which can indicate coolant leakage.	x	x					
Glycol content, %	Calculated by refractive index	Gives the glycol content for coolants.							x
IpH	IP 177/ASTM D 664	Initial pH.		x					
Kinematic Viscosity at 100 °C	Houillon	The oil's viscosity or thickness at 100 °C.	x	x	x				
Kinematic Viscosity at 40 °C	Houillon	The oil's viscosity or thickness at 40 °C.	x	x	x	x		x	
Neutralisation number	IP 139/ASTM D 974	Specifies the concentration of acidic contaminants in the oil, which shows if the oil is oxidised or contaminated.			x	x			
Nitration	IR	The test shows the oil's degree of degradation or contamination as a result of the reaction with air.	x	x					
Oil Condition Index, OCI	In-house	This test gives a measure of the oil's degree of contamination with respect to soot, water and metals.	x	x					
Oxidation	IR	The test shows the oil's degree of oxidation, degradation or contamination as a result of the reaction with air.	x	x					
Particle content	ISO 4406	Reports a cleanliness code based on the number of solid particles. The limits for the test are set on the basis of general recommendations for machine hydraulics.			x				x
pH	IP 177/ASTM D 664	Gives the pH value, where 7 is neutral.							x
Refractive index	In-house	The refractive index gives the relationship between the speed of light in a vacuum compared with that in the sample, which is used to determine the glycol content in coolants.							x
Reserve alkalinity	ASTM D 1121	Gives a measure of the coolant's resistance to corrosion.							x
Soot	IR, DIN 51452	Gives the soot content in the oil.	x	x					
Water content	Crackle/carbide	Specifies the oil's water content.	x	x			x		
Water content	ASTM D 6304 down to 100 ppm.	Specifies the oil's water content.			x	x			

## Test suites - Lab Advisor Alert

Our test suites are customised based on the lubricants or the system to be analysed. In the table to the left, you can see which analyses are included in each test suite.

