

## Grease Analysis



The primary function of grease is to coat the machine surfaces and to lubricate them without leakage due to centrifugal forces or pressures. Also, grease must be able to flow throughout all components it is intended to.

A huge fraction of component bearings is being lubricated with grease. Routine grease testing is an important part of predictive and preventive maintenance programs.

### TUV India's Routine testing and analysis helps to determine:

- Grease Condition – normal, contamination present, oxidized, remaining useful life
- Bearing Condition – the level of tear
- Frequency of re-greasing – application intervals
- Condition of the System
- Contamination Scrutiny

TUV India provides range of condition monitoring services that consist of elemental examination, Particle Quantifier (PQ) and wear debris study for Grease applications.

### Recommended tests for grease are:

Test Parameters	Testing Methods
Wear Metal and Contamination Metals	ASTM D5185
Cone penetration	ASTM D217
Acidity	IS 1448 (Part-2)
Free Acid	ASTM D128
Alkalinity	-
Free Alkali	ASTM D128
Dropping Point	ASTM D2265 & D566/ IP 396
Oxidation Stability	ASTM D942/ IP 142
Copper Corrosion	ASTM D4048/ IP112
Oil Separation	ASTM D4425 & D1742/ IP 121
Evaporation Loss	IP 183
Water washout	IP 215
Water Content	ASTM D128
Glycerin	ASTM D128
Sulphur	ASTM D4294 & ASTM D5453
Unsaponifiable Matter	ASTM D128
Soap Content	ASTM D128
ASH	ASTM D128
Viscosity	ASTM D445/ ISO 3104



Density	IS 1448 (Part-16)/ ASTM D1298
Cone Penetration	ASTM D217/ IP 50/
Analytical Ferrography	ASTM D7690

### About Us:

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We are proud to provide increasing levels of services to the best known, largest global and national companies as well as medium and small industries in diverse sectors like Oil & Gas, Petro-chemical, Nuclear, Renewables, Infrastructure, Food, Power, Manufacturing, Chemicals, Pharma, Paper, Automobiles, Railways, Aerospace, Defence, IT, Health, Hospitality, Retail, etc.

Over 1400 competent and experienced TUV India experts spread across India and over 14000 TÜV NORD experts all over the world, enthusiastically support our clients by providing value-added services in Industry Inspection, European / International Approvals, Management System & IT Certification, Sustainability, Energy Audit, Water Audit, Carbon Services, Building Infrastructure & PMC, Renewable Energy, Food & Packaging Testing, Food Certification & Inspection; Testing of restricted and banned chemicals in Automotive and Electrical & Electronics components and other regulated industries, Product Testing – Electricals, Electronics and Industrial Machinery; Product Certification; Petroleum, Chemicals & Gas Cargo Inspection; Petroleum, Chemicals & Gas Testing; Railway Technology; Engineering, Safety Studies, and knowledge enhancing training programs under TUV India Training Academy.

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#### Testing Laboratory Presence at Other Locations

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