

List of Item and amount of sample that required for testing

### Lubricant Oil Test

no	Test Item	Method	amount of sample	remark
1	Appearance	Visual	50 g	
2	Brookfield Viscosity	ASTM D2983	100 ml	
3	Color	ASTM D1500	50 ml	test temp > 20 c
4	Copper Corrosion	ASTM D130	50 ml	
5	Density	ASTM D1298	1000 ml	
6	Falex Pin & Vee Block	ASTM D2670	200 ml	
7*	Flash Point COC	ASTM D92	200 ml	
8*	Flash Point PMCC	ASTM D93	200 ml	
9	Foam Tendency, Foam Stability	ASTM D892	500 ml	
10	Insoluble	ASTM D893	100 ml	
11	IR	ASTM E1252	5 ml/g	
12	Metal Ca/Zn/P/S	ASTM D4294	20 ml	for 1 calibration
13	Oxidation	IP 48	100 ml	
14	pH	pH meter	100 ml	
15	Pour Point <= -24 C	ASTM D97	100 ml	
16	Pour Point >-24 C	ASTM D97	100 ml	
17	Rust Preventing	ASTM D665	600 ml	
18	Suphate Ash	ASTM D874	150 ml	
19	Total Acid Number	ASTM D974	50 ml	
20	Total Base Number	ASTM D2896	10 ml	
21*	Viscosity @ 40/100 C	ASTM D445	5 ml	
22	Viscosity at Low Temp. (CCS)	ASTM D5293	100 ml	
23*	Viscosity Index	ASTM D2270	100 ml	
24	Water Content	ASTM D95	200 g	
25	Water separability	ASTM D1401	1000 ml	

### Lubricant Grease Test

no	Test Item	Method	amount of sample	remark
1	Copper corrosion	ASTM D4048	200 g	
2	Drop melt point	ASTM D127	10 g	
3	Dropping Point	ASTM D2265	10 g	
4	Four Ball (EP)	ASTM D2596	200 ml/g	
5	Four Ball (Wear Scar)	ASTM D2266	50 ml/g	
6	Free Alkali	IP 37	20 ml	
7	Oil Separate	ASTM D1742	300 g	
8	Penetration of petrolatum	ASTM D937	1000 g	
9	Roll Stability	ASTM D1831	100 g	
10	Softening Point	ASTM D36	20 g	
11	Water Spray Off	ASTM D4049	50 g	
12	UnWorked Penetration	ASTM D217	1000 g	
13	Worked Penetration	ASTM D217	1000 g	

\* ISO/IEC 17025 Accredited

## Lube Oil Testing Machine





## Grease Testing Machine



