PERTAMINA TURBOLUBE XT SERIES

PERTAMINA LUBRICANTS

Premium Extreme Pressure
Turbine Oils

Product Description

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Pertamina Turbolube XT Series is a range of Premium Extreme Pressure Turbine Oils formulated from a combination of hydrocracked base oils together with carefully selected additives that provide excellent thermal and oxidative stability.

Pertamina Turbolube Series is available in 3 viscosity variants:

- Pertamina Turbolube ISO VG 32
- Pertamina Turbolube ISO VG 46
- Pertamina Turbolube ISO VG 68

Application

Pertamina Turbolube Series is the oil-of-choice for a variety of Turbines and Turbine Systems such as in bearings, Hydraulic Systems and Gearbox Systems for: Combined Cycle Turbine Systems; Large Heavy Duty and Smaller Gas Turbines; Steam Turbines and Turbines with Heavy Loaded Gears.

NOTE: Please refer to the Manufacturer's specifications for selecting the appropriate ISO Viscosity Variant.

Performance Benefits

The advanced technology of Turbines and specialised Industrial Equipment requiring superior anti-wear / anti-friction properties makes the Pertamina Turbolube Series the ideal choice:

- Excellent Air Release, Water Separation and Foaming Prevention that provides trouble-free operation through its excellent water separability property to ensure rapid separation of water accumulated from steam condensate, its foam inhibitor additive that prevents excessive foam build-up, and its quick air release that minimises pump cavitation.
- Reduced Downtime and Maintenance Cost that delivers excellent protection against varnish, rust and corrosion. Also, its high oxidation stability ensures optimum performance and a cleaner system contributes to a reduction in unscheduled downtime.
- Extended Oil Drain Intervals as a result of the oil's excellent oxidation resistance and thermal stability at high temperatures that minimises oil thickening and the formation of harmful sludge and deposits.
- Longer Equipment Uptime and Productivity because of the optimised protection against rust and corrosion of metal surfaces.

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Typical Characteristic

Characteristics	Test method	TURBOLUBE XT		
		32	46	68
ISO Viscosity Grade	-	32	46	68
Appearance	-	clear	clear	clear
Density at 15 °C, kg/l	ASTM D-4052	0.8568	0.8568	0.8585
Kinematic Viscosity, at 40 °C, cSt	ASTM D-445	34.80	43.63	68.72
at 100 °C, cSt	ASTM D-445	6.48	7.11	9.14
Viscosity Index	ASTM D-2270	143	123	109
ASTM Colour	ASTM D-1500	L 0.5	L 0.5	L 0.5
Flash Point, °C	ASTM D-92	258	1535	1949
Pour Point, °C	ASTM D-5950	-15	-18	-21
RPVOT, minutes	ASTM D-2272	2328	1535	1949
Foaming Tend/Stab, ml	ASTM D-892			
Seq I		10/0	0/0	30/0
Seq II		10/0	20/0	20/0
Seq III		10/0	0/0	30/0
Air release Value, minutes	ASTM D-3427	2.3	1.9	2.3
Water Separability, minutes	ASTM D-1401	40/40/0(10')	40/40/0(10')	40/40/0(15')
Copper Corrossion Test	ASTM D-130	1A	1A	1A
Rust Preventive	ASTM D-665A	Pass	Pass	Pass
Total Acid Number, mgkOH/g	ASTM D-664	0.12	0.089	0.094

Performance Standards

Pertamina Turbolube XT Series approvals:

- Alstom Turbine for ISO VG 32 and ISO VG 46

Pertamina Turbolube Series meets the performance specifications of:

- GEK 32568 C, GEK 32568F,
- GEK 101941A, GEK 107395A,
- GEK 28143A, GEK 46506D
- DIN 51524 Part 1 (HL)
- DIN 51515 Part 1 (L-TD)
- DIN 51515 Part 2 (L-TG)
- BS 489 (CIGRE)
- MIL-L 17672D, MIL-L-17331-G, MIL 17331-B
- CEGB Standard 207001
- U.S. Steel 120, 126
- Cincinnati Machine P-38, P-45, P-54, P-55,
- ABB-Stal VTI 3200-3, 81 21 08
- AFNOR E-48600 HL
- SIEMENS AG TLV 9013 04/01
- SOLAR ES9-224 U
- ASTM D 4304, Type II (EP)
- Westinghouse 21T0591 and 55125Z3

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Health and Safety

Please contact Pertamina Marketing Head Office for appropriate Material Safety Data Sheet containing information related to Work Health and Safety protection.

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