

INDUSTRIAL TURBINES OIL
Premium Mineral Technology

TURBO GST-LUBE

PRODUCT DESCRIPTION:

Zinc-Free turbine lubricants specifically designed for use in gas and steam turbine applications. Formulated with carefully selected base stocks and additives, including antioxidants, rust and corrosion inhibitors and anti-foam agents. These components provide outstanding resistance to oxidation and chemical degradation over time. It exhibit excellent water separability, resistance to emulsion formation and anti-foaming characteristics which provide reliable operation. Their enhanced air release properties are critical for turbine hydraulic control mechanisms.

Applications:

- Electric power generation for high output base load utilities
- Gas Turbine Combined Cycle Power Plants operating in base load or peak generation modes
- Gas turbines in Captive Power plants
- Gas or steam turbine prime movers
- Hydroelectric turbine applications

Meets and Exceeds Performance Levels:

ISO 8068 TSA/TGA	Siemens TLV 9013 04
DIN 51515-1 TD	ASTM D 4304 Type I
BS 489:1999	JIS K 2213 -1983 Type II
Ansaldo Energia 606W807 Rev.C (2012)	Doosan Skoda Power
GE GEK 28143B	Nuovo Pignone SOM 17366
	Mitsubishi Spec. NO. E00-001 Rev.2

Typical Properties:

Property	ISO 32	ISO 46	ISO 68
Grade	ISO 32	ISO 46	ISO 68
Air Release, 50 C, min, ASTM D3427	2	3	4
Copper Strip Corrosion, 3 h, 100 C, Rating, ASTM D130	1B	1B	1B
Density @ 15 C, g/cm ³ , ASTM D1298	0.85	0.86	
Emulsion, Time to 3 mL Emulsion, 54 C, min, ASTM D1401	10	10	10
FZG Scuffing, Fail Load Stage, A/8.3/90, ISO 14635-1	6	6	
Flash Point, Cleveland Open Cup, °C, ASTM D92	228	230	242
Kinematic Viscosity @ 100 C, mm ² /s, ASTM D445	5.5	6.8	8.6
Kinematic Viscosity @ 40 C, mm ² /s, ASTM D445	30	44	64
Neutralization Number, mgKOH/g, ASTM D974	0.1	0.1	0.1
Pour Point, °C, ASTM D97	-30	-30	-30
Rotating Pressure Vessel Oxidation Test, min, ASTM D2272	1000	1000	1000
Rust Characteristics, Procedure B, ASTM D665	PASS	PASS	PASS

Turbine Oil Stability Test, Life to 2.0 mg KOH/g, h, ASTM D943	10000	10000	8000
Viscosity Index, ASTM D2270	117	113	110