



Gazpromneft Turbine Oil F Synth EP - 32, 46



Steam & gas turbines



Excellent oxidation stability



EP properties



Demulsibility



Foam stability



Synthetic oils

Gazpromneft Turbine Oil F Synth EP - 32, 46 is a series of synthetic turbine oils with extreme pressure additives designed for the lubrication of modern gas turbines and combined cycle gas turbines. The oils are used in high-speed gas turbines and CCGTs, including geared turbine systems. The use of synthetic base oils in combination with antioxidant additives allows using them for lubrication of bearings and gearboxes in heat stressed turbines according to DIN 51515 Part 2. Operation with an extended drain interval is possible compared to mineral-based oils.

Properties/Features/Potential benefits

- High extreme pressure characteristics → reduced wear and the likelihood of destruction of working surfaces of gears and bearings in gearboxes → maximum run life of the units
- Excellent oxidation stability → possibility of extended lubricant change intervals compared to mineral-based oils → reduced maintenance costs
- Low tendency to form deposits → minimizing the formation of varnishes on thrust bearings and sludge in oil tanks → reducing the likelihood of unscheduled equipment shutdowns
- Excellent demulsibility → no persistent oil-in-water emulsions clogging filters → maintaining lubrication system performance and equipment life
- Excellent anti-foam properties → minimization of foam formation and continuity of oil flow to friction units → reduction of the likelihood of unit overheating
- Excellent air release properties → fast separation of air from oil ensures stable lubricating film → maintenance equipment life
- Excellent viscosity-temperature characteristics → maintenance of the bearing capacity of the oil film at increased temperatures → reliable operation of the units
- High corrosion protection → oil effectively protects turbine parts from effects of oil oxidation products → reduced spare part costs

Applications

- Highly loaded gas turbines and CCGTs of geared turbine systems at CHPPs and SDPPs.
- Gas turbines of geared turbine systems of compressor units and power units at oil and gas industry facilities.

Health, Safety, Environment

Information is provided for products in the relevant Safety Data Sheet (SDS). This provides guidance on potential hazards, precautions and first-aid measures, together with environmental effects and disposal of used products. SDS's are available upon request through your sales contract office. This product should not be used for purposes other than its intended use.

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Specifications	ISO viscosity grade	
	32	46
DIN 51515 Part 1, DIN 51515 Part 2	\checkmark	\checkmark
ISO 8068 L-TSA & L-TGA, L-TSE & L-TGE	✓	✓
General Electric GEK 101941A, GEK 107395A, GEK 121608, GEK 32568K	✓	
Siemens TLV901304, Siemens TLV901305	~	\checkmark
Brush	~	
ABB	~	✓
HTGD 90117 AD	✓	✓
Solar ES 9224Y Class II	~	
Power Machines		~

Typical characteristics

Properties	Method	ISO viscosity grade	
		32	46
Kinematic viscosity, mm²/s: at 40 °C at 100 °C	ASTM D 445	31.8 5.8	46.1 7.6
Viscosity index	ASTM D 2270	120	120
Flash Point (COC), °C	ASTM D 92	240	250
Pour point, °C	GOST 20287	-33	-25
Acid number, mg KOH/g	GOST 11362	0.10	0.10
Density at 20 °C, kg/m ³	ASTM D 4052	841	844
Corrosion of copper, 3 h at 100 °C, points	ASTM D 130	1c	1c

Oils of the Gazpromneft Turbine Oil F Synth EP series demonstrate high performance in tests in comparison with the normal values prescribed by international standards:



The Gazpromneft Turbine Oil F Synth EP series of oils has good tribological properties that ensure the maximum overhaul life of gearboxes.

*DIN 51354 Test; **ASTM D 3427 Test



The Gazpromneft Turbine Oil F Synth EP series of oils has a high air release capability, maintaining the stability of the oil film and reducing the likelihood of unscheduled downtime of units.

ISO 45001



Gazpromneft – Lubricants, Ltd. 17, Butlerova street, Moscow, 117342, Russia Tel: +7 (495) 642-99-69 Fax:+7 (495) 921-48-63 www.qazpromneft-oil.com

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