

QATOL NOVA GST TURBINE OILs

High quality Industrial Steam and Gas Turbine Oil

PRODUCT DESCRIPTION:

QATOL NOVA GST OILs turbine oils were developed for gas, steam, and expansion turbines as well as for turbo compressors with and without gearboxes based on the latest lubrication technology.

The excellent properties of the hydro-finished base oils produced in a special process are enhanced using a carefully selected additive system.

QATOL NOVA GST OILs contain no metal-organic compounds and are therefore ash less. They provide a zinc-free wear protection.

This product family is formulated with synthesized hydrocarbons and a unique additive system. This formula provides outstanding low temperature fluidity and exceptional resistance to degradation at high temperatures.

QATOL NOVA GST OILs Series lubricants also provide excellent anti wear properties as well as protection against rust and corrosion plus good air release performance and resistance to foaming.

These characteristics help to provide superior resistance to thermal/oxidative degradation during the heat soaking period after shutdown and permit rapid oil circulation at low temperatures during start-up. Degradation resistance is a key attribute in avoiding harmful deposits that can interfere with lubrication supply to the bearings or foul critical servo-valves. This is a particular issue when gas turbines are running in cycling mode and experience multiple thermal stress cycles. Since low temperature fluidity and high viscosity index are inherent characteristics of the fluids, they resist changes in service as a result of mechanical shearing or repeated cycling from low to high temperatures.

PRODUCT FEATURES:

- Outstanding high thermal/oxidative stability and deposit control:
- High level of resistance to heat soak-back after turbine shutdown Less deposit build-up and improved reliability and lower maintenance costs Long oil change life and lower product costs
- Excellent low temperature fluidity:
- Reliable flow and lubrication during cold starts, even at very low temperatures
- Naturally high Viscosity Index:
- Improved equipment protection at high temperatures
- Very good resistance to foaming and good air release:
- Efficient system operation and less un-planned stoppages
- Excellent antiwear performance:
- Excellent equipment protection and reduced equipment replacement costs.
- Superior resistance to oxidation & thermal degradation provides a very long life lubricant because of low deposit / lacquer formation.
- Superior air release properties mean they meet the requirements of all turbine manufacturers.
- Excellent water separation and corrosion inhibition mean reduced down time through prolonged lubricant life and increased equipment reliability.
- Suitable for the lubrication of both gas and steam turbines makes them suitable for combined cycle generating stations.

APPLICATIONS:

QATOL NOVA GST OILS are primarily intended for the lubrication of gas and steam turbines where the base oils used have been selected to give the requisite water separation characteristics as well as providing resistance to foaming and air entrainment, all essential properties for this demanding application.

QATOL NOVA GST OILS are recommended for industrial gas turbines where the lubricant is likely to be exposed to very high localized temperatures. They are also suitable for the lubrication of steam turbines and Combined Cycle generating systems where the steam and gas turbines share a common oil supply.

QATOL NOVA GST OILS are especially suited for use in turbine systems with a common control and lubricating oil circuit. It can also be used as a bearing and sealing oil in hydrogen-cooled generators.

SPECIFICATIONS:

- DIN 51 515-1 (TD) with and without gearbox.
- DIN 51 515-2 (TG) with and without gearbox.
- GE GEK 28568 A
- GE GEK 32568 F
- GE GEK 101941 A
- GE GEK 107395 A
- Siemens TLV 901304
- MIL-PRF-17331 J
- Solar ES 9-224 (Class I / Class II)

KEY PROPERTIES:

Properties	Units	Values			Test Methods
ISO VG		32	46	68	
Density @ 35 °C	Kg/m ³	863	868	871	ASTM D-4052
Color	-	<1.0	<1.0	1.0	ASTM D-1500
Viscositv @ 40 °C	mm ² /s	31	46	67	ASTM D-445
Viscosity @ 100 °C	mm ² /s	5.7	7.5	9.7	ASTM D-445
Viscosity Index	-	126	128	126	ASTM D-2270
Total Acid Number	mg KOH/g	0.15	0.15	0.15	ASTM D-664
Flash Point	°C	220	228	238	ASTM D-92
Pour Point	°C	-30	-27	-24	ASTM D-97
Air Release	min.	<5.0	<5.0	<5.0	IP 313
Foaming Sequence I Sequence II Sequence III	ml/ml	15/0 20/0 15/0	15/0 20/0 15/0	15/0 20/0 15/0	ASTM D-892
Demulsibility @ 54°C	ml/ml/ml (min)	40-40-0 <15	40-40-0 <15	40-40-0 <15	ASTM D-1401

Rust Inhibition, Iron protection	rating	Pass	Pass	Pass	ASTM D-665A
Corrosion, Copper strip, 3hrs @ 100°C	rating	1a	1a	1a	ASTM D-130
FZG gear test (A/8.3/90) Failure load stage	-	>10	>10	>10	DIN 51354
TOST life, Time to 2 TAN	hrs.	>10000	>10000	>10000	ASTM D-943
RPVOT (RBOT)	min.	>1000	>1000	>1000	ASTM D-2272

AVAILABLE PACKAGES: 208L, 25L, 20L,