

GST® 2300

32, 46

PRODUCT DESCRIPTION

GST® 2300 oils are formulated with premium base oil technology and are highly recommended for use in gas and steam turbines with and without loaded gearboxes. GST 2300 oils are designed to meet the critical lubrication demands of:

- · combined cycle turbines
- · large heavy duty industrial gas turbines
- · gas and steam turbines

They are an excellent recommendation for many other industrial applications including air compression and where R&O type oils are recommended.

CUSTOMER BENEFITS

GST 2300 deliver value through:

- Outstanding oxidation stability for long service at elevated temperatures. Formulated with premium base oil technology and an ashless, zinc-free formulation.
- · Minimal sludge and varnish formation
- Rapid water separation keeps water in oil to a minimum
- Rust and corrosion protection
- High viscosity index assures minimum viscosity change with temperature variations
- Resistance to foam formation helps prevent reservoir overflow
- Quick air release minimizes the possibility of pump cavitation in systems with high circulation rates and small reservoirs

FEATURES

GST 2300 oils are formulated with premium base oil technology and an ashless, zinc-free formulation that provides exceptional oxidation stability, water separability, and protection against rust and corrosion.

Higher temperatures in advanced gas and steam turbines require a circulating system oil with exceptional high temperature **thermal stability**, **oxidation resistance** and low sludging potential. GST 2300 oils have **outstanding thermal and oxidation stability and excellent sludge control**.

Corrosion inhibition protects turbine shafts, gears and lubrication system parts from corrosion and rusting.

GST 2300 oils have excellent **water separability** characteristics which allow these oils to maintain a high film strength coating on critical wear points of bearings and gear reducers and to help ensure rapid removal of water contamination.

Foam inhibition helps to prevent sump overflow.

Product(s) manufactured in the USA.

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

APPLICATIONS

GST® 2300 oils are highly recommended for use in gas and steam turbines with and without loaded gearboxes. GST 2300 oils are designed to meet the critical lubrication demands of combined cycle turbines, large heavy duty industrial gas turbines, and gas and steam turbines with loaded gears. They are an excellent recommendation for many other industrial applications including air compression where R&O type oils are recommended.

The following viscosity grades are formulated to meet the specified OEM requirements:

GST 2300 32

- · meets and exceeds
 - ASTM D4304-00, Type I and Type II (EP)
 - British Standard 489: 1999
 - DIN 51515, L-TD and L-TG
 - General Electric GEK-32568j, GEK-101941A, GEK 28143A, GEK-46506D, GEK-27070
 - MAG Cincinnati, Cincinnati Machine P-38
 - Siemens Westinghouse M spec 55125Z3
 - Solar ES 9-224, Class II
- is approved by Alstom against HTGD 90117 for non-geared and geared gas and steam turbines
- is approved by **Siemens** against TLV 9013 04 for steam and gas turbosets with and without gearbox
- can obtain customer-specific approval from Toshiba (contact Lube Tek at 1-800-LUBE-TEK)

GST 2300 46

- · meets and exceeds
 - ASTM D4304-00, Type I and Type II (EP)
 - British Standard 489: 1999
 - DIN 51515, L-TD and L-TG
 - MAG Cincinnati, Cincinnati Machine P-55
 - Solar ES 9-224, Class II
- is approved by **Alstom** against HTGD 90117 for non-geared and geared gas and steam turbines
- is approved by **Siemens** against TLV 9013 04 for steam and gas turbosets with and without gearbox
- replaces GST Oil EP ISO 46

Do not use in high pressure systems in the vicinity of flames, sparks, and hot surfaces. Use only in well ventilated areas. Keep container closed.

Do not use in breathing air apparatus or medical equipment.

TYPICAL TEST DATA

ISO Grade	32	46
Product Number	253090	253091
SDS Number	12798	12798
AGMA Grade	_	1
API Gravity	32.7	32.0
Viscosity, Kinematic cSt at 40°C cSt at 100°C	30.4 5.2	43.7 6.6
Viscosity, Saybolt SUS at 100°F SUS at 210°F	157 43.8	225 48.2
Viscosity Index	102	101
Flash Point, °C(°F)	222(432)	224(435)
Pour Point, °C(°F)	-33(-27)	-33(-27)
Oxidation Stability ASTM D943 ^a ASTM D2272 ^b	> 10,000 2,300	> 10,000 2,300
FZG, Fail stage, DIN 51354	12	12

- a Hours to 2.0 mg KOH/g acid number D943.
- b Minutes to 25 psi pressure drop.

Minor variations in product typical test data are to be expected in normal manufacturing.