GST® OIL
32, 46, 68, 100

PRODUCT DESCRIPTION

GST® Oils are formulated with premium base oil technology designed to meet the critical demands of:

- non-geared gas, steam, and hydroelectric turbine bearing lubrication
- reduction gear lubrication in marine operations

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

CUSTOMER BENEFITS

GST Oils deliver value through:

- **Exceptional oxidation stability** for long service life at elevated temperatures. Formulated with premium base oil technology and an ashless, zinc-free formulation.
- **Rust and corrosion protection**
- **High viscosity index** helps ensure minimum viscosity change when variations in temperature occur.
- **Minimum foam** helps prevent sump overflow or erratic governor operation.
- **Fast air release** minimizes possibility of pump cavitation in systems with high circulation rates and small reservoirs.
- **Exceptional thermal stability** minimizes deposit formation.
- **Rapid water separation** keeps water in oil to a minimum.
- **Hydraulic fluid service** — GST Oils 32, 46 and 68 are excellent hydraulic fluids in low pressure systems up to 1000 psi.
- **Air compressor** lubricant when OEM recommends R&O type oil.

FEATURES

GST 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 circulating system oil with exceptional high temperature stability. GST Oils have outstanding **thermal and oxidation stability**.

Nonvolatile **oxidation inhibition** minimizes the evaporative loss of the inhibitors, a common problem with turbine oils where bearing temperatures are high and system capacities are limited. With retained oxidation resistance for long periods under high temperature conditions, GST Oils will promote long oil service life and help minimize turbine down time.

Corrosion inhibition protects costly turbine shafts and gears from corrosion and rusting.

GST Oils have excellent demulsibility characteristics which allow these oils to maintain a high film strength coating on critical wear points of bearings and gear reducers and assure fast removal of water contamination.

Foam inhibition helps prevent sump overflow and erratic governor operation.

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.

A **Chevron** company product

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APPLICATIONS

GST® Oils are formulated to meet the critical demands of non-geared gas, steam, and hydroelectric turbine bearing lubrication, and reduction gear lubrication in marine operations. 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 Oil 32

- meets and exceeds
  - **ASTM D4304 Type I**, **British Standard 489**, and **DIN 51515** standard organization requirements for new lubricants used in gas and steam turbines and auxiliary equipment
  - **General Electric** GEK-32568j, GEK 28143A, GEK-46506D, GEK-27070
  - **Solar** ES 9 224 requirements for gas turbine oils
- meets
  - **MAG Cincinnati, Cincinnati Machine** P-38
- is approved by
  - **Alstom Power** HTGD 90117 (for non-geared turbines)
  - **Siemens** TLV 901305
  - **Siemens Westinghouse** M spec 55125Z3

GST Oil 46

- meets
  - **ASTM D4304 Type I**, **British Standard 489**, and **DIN 51515** standard organization requirements for new lubricants used in gas and steam turbines and auxiliary equipment
  - **MAG Cincinnati, Cincinnati Machine** P-55
  - **Solar** ES 9 224 requirements for gas turbine oils
- is approved by
  - **Alstom Power** HTGD 90117 (for non-geared turbines)
  - **Ansaldo Energia** TG02-0171-E00000/B
  - **Siemens** TLV 901305
- successfully used in some reactor coolant pump motor bearings.

GST Oil 68

- meets
  - **ASTM D4304 Type I**, **British Standard 489**, and **DIN 51515** standard organization requirements for new lubricants used in gas and steam turbines and auxiliary equipment
  - **MAG Cincinnati, Cincinnati Machine** P-54
- suitable for use in hydroelectric turbines, land and marine steam turbines, and associated reduction gears when OEM recommends R&O type oil.

GST Oil 100

- meets
  - **ASTM D4304 Type I**, **British Standard 489**, and **DIN 51515** standard organization requirements for new lubricants used in gas and steam turbines and auxiliary equipment
- suitable for use in hydroelectric turbines, land and marine steam turbines, and associated reduction gears when OEM recommends R&O type oil.

GST Oil 32, 46, 68, 100 are registered by **NSF** and are acceptable as lubricants where there is no possibility of food contact (H2) in and around food processing areas. The NSF Nonfood Compounds Registration Program is a continuation of the USDA product approval and listing program, which is based on meeting regulatory requirements of appropriate use, ingredient review and labeling verification.

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	68	100
Product Number	*253026*	*253027*	*253028*	*253029*
SDS Number	*6710*	*6710*	*6710*	*6710*
AGMA Grade	—	1	2	3
API Gravity	32.7	32.0	31.7	31.4
Viscosity, Kinematic cSt at 40°C cSt at 100°C	 32.0 5.4	 43.7 6.6	 68.0 8.8	 100.0 11.4
Viscosity, Saybolt SUS at 100°F SUS at 210°F	 165 44.4	 225 48.2	 352 55.9	 520 65.4
Viscosity Index	102	101	102	100
Flash Point, °C(°F)	222(432)	224(435)	245(473)	262(504)
Pour Point, °C(°F)	-36(-33)	-36(-33)	-33(-27)	-30(-22)
Oxidation Stability ASTM D943[a] ASTM D2272[b]	 17,000 1700	 12,000 1400	 11,000 1400	 11,000 1400

a Hours to 2.0 mg KOH/g acid number modified D943, allowed to run beyond 10,000 h.
b Minutes to 25 psi pressure drop.

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

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.