FAMILY OF PRODUCTS

TURBINE OILS

CHEVRON LUBRICANTS CAN HELP YOU **RUN BETTER LONGER**

LUBRICANTS FOR

TURBINE OILS

Keep Reliability Turning

In a work environment where performance and profitability are constantly in motion, overhaul costs are expensive. By improving equipment part life, and in turn, production time, Chevron's collection of premium lubricants for turbine applications can help you significantly lower total cost of ownership.

Rely on Chevron to help you reach the potential to:

- Maximize Equipment Durability
- Extend Service Protection
- Improve Supplier Performance

GST® Premium 32

REACH A NEW LEVEL OF RELIABILITY WITH THE RBL™ PROGRAM

Reliability matters at every step of the value chain. Chevron Specialists can help add even more value to your lubrication program by providing expertise along with world-class products and targeted services – all working in sync to help you get the most out of your equipment and operations, time and time again.

To learn more, contact your marketer.

RBL RUN BETTER LONGER

CHEVRONLUBRICANTS.COM/RBL

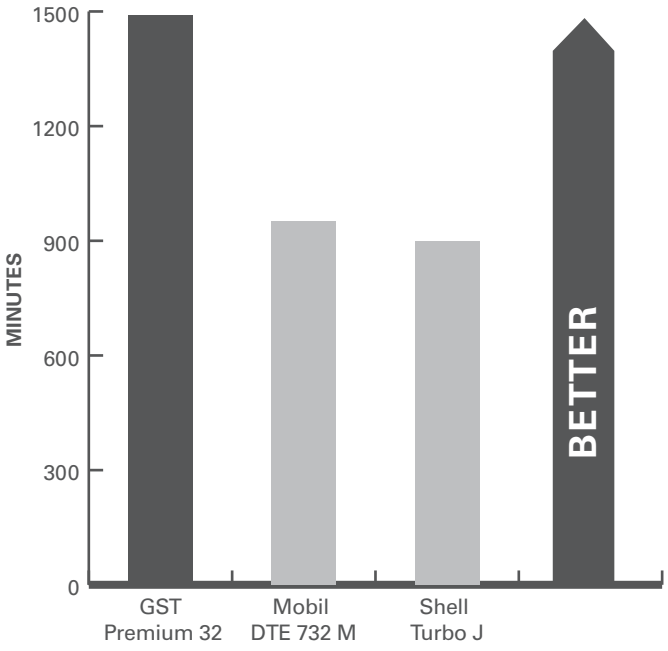
GST® Premium 32

Our premium, top of the line, non-geared gas and steam turbine oil is specifically formulated for use in turbines where extreme temperatures are experienced. GST Premium 32 is uniquely formulated to meet the industry's highest performance requirements to minimize the effects of sludge and varnish on critical turbine components. GST Premium 32 turbine oil has exceptional thermal and oxidative stability performance in Mitsubishi Hitachi Power Systems, GE, Alstom, Siemens and Solar turbines in non-geared gas and steam turbines where extreme temperatures can be experienced. It is suitable for severe service industrial applications that require a rust and oxidation inhibited (R&O) ISO 32 circulating oil with extended service capability.

GST Premium 32 turbine oil is formulated using highly refined Group II base oils with a unique blend of additives that minimizes varnish and deposit formation as demanded by the stringent Mitsubishi Hitachi Power Systems (MHPS) MS04-MA MS04–MA–CL002 and CL001 specifications. GST Premium 32 turbine oil is developed to meet the critical demands of non-geared steam and gas turbines and combined cycle.

A review of published competitive Oxidation Stability RPVOT (ASTM D2272, min) relative to turbine oil life is reflected below.

GST PREMIUM 32 TURBINE OIL



Oxidation Stability RPVOT

Competitive data from published product literature.

GST Premium 32 turbine oil is approved for:

- Alstom HTGD 90 117 (for non-geared turbines)
- Mitsubishi Hitachi Power Systems MS04-MA-CL001, CL002
- Siemens TLV 9013 04 and TLV 9013 05
- MAN Diesel & Turbo 10000494596 rev 2

GST Premium 32 turbine oil meets the requirements of the following specifications:

- ASTM D 4304 Type I, III
- BS 489-1999
- China National Std GB 11120-2011 L-TSA Type A & B
- China National Std GB 11120-2011 L-TGA
- DIN 51515 Part 1 L-TD
- DIN 51515 Part 2 L-TG
- GEC Alstom NBA P50001A and NBA 50003A
- General Electric GEK 27070, GEK 28143A, GEK 28143B, GEK 32568E, GEK 32568F, GEK 32568J, GEK 46506D, GEK 46506E
- ISO 6743/5 (L-TSA, L-TGA)
- ISO 8068 L-TSA
- ISO 8068 L-TGA
- JIS K-2213 Type 2
- Siemens Industrial Turbomachinery MAT 81 21 01
- Siemens Westinghouse PD-55125Z3
- Solar ES 9-224, Class II

Available as ISOCLEAN® Certified to meet specific OEM ISO Cleanliness specifications.

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.

GST® 2300 ISO 32, 46

GST 2300 is our best turbine oil for geared systems. It is designed to meet the critical lubrication demands of combined cycle turbines, large heavy-duty industrial gas turbines, and gas and steam operations. GST 2300 is formulated with an extreme pressure (EP) additive to protect gears in geared turbine systems. It is formulated for rapid water separation, excellent water demulsibility, rust and corrosion protection and quick air release that helps resist foam formation. GST 2300 is also recommended for other industrial applications, such as air compression where a rust and oxidation (R&O) type oil is recommended.

GST 2300 32 and 46 are approved for:

- Alstom HTGD 90117 (for geared and non-geared gas and steam turbines)
- Siemens TLV 9013 04 and TLV 9013 05
- Toshiba LST-GMH-XUTW2-0005 Rev. 2
- Ansaldo TG02-0171-E00000/B

GST 2300 32 and 46 meet the requirements of:

- ASTM D 4304 Type I, II, and III
- BS 489-1999
- DIN 51515 Part 1 L-TD
- DIN 51515 Part 2 L-TG
- General Electric GEK 101941A, GEK 27070, GEK 28143A, GEK 28143B, GEK 32568E, GEK 32568F, GEK 32568J, GEK 46506D, GEK 46506E (ISO 32)
- JIS K-2213 Type 2
- MAG Cincinnati, Cincinnati Machine P-38 (ISO 32), P-55 (ISO 46)
- Siemens Industrial Turbomachinery MAT 81 21 01, 81 21 02, 81 21 06, 81 21 07, 81 21 08, 81 21 09
- Siemens Westinghouse PD-55125Z3
- Solar ES 9-224, Class II

Available as ISOCLEAN® Certified to meet specific OEM ISO Cleanliness specifications.

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GST Oil
ISO 32, 46, 68, 100

GST Oil is formulated with premium base oil technology designed to meet the critical demands of non-geared gas, steam and hydroelectric turbine bearing lubrication. GST Oil is excellent for other industrial applications such as air compression, where an R&O oil of appropriate viscosity is needed.

GST Oil has exceptional oxidation stability, very good water demulsibility, and rust and corrosion protection to help minimize foaming with fast air release and rapid water separation.

GST oil is approved for:

- Alstom HTGD 90117 (for non-geared turbines) (ISO 32, 46)
- Siemens TLV 9013 04 and TLV 9013 05 (ISO 32, 46)
- MAN Diesel & Turbo 10000494596 rev 2 (ISO 32, 46, 68)
- Ansaldo TG02-0171-E00000/B (ISO 46)

GST 32 and 46 meet the requirements of:

- ASTM D 4304 Type I, III
- BS 489-1999
- Chinese specification GB 1120-2011 L-TSA Type A & B
- Chinese specification GB 1120-2011 L-TGA, L-TGSB
- DIN 51515 Part 1 L-TD
- DIN 51515 Part 2 L-TG (ISO 32, 46)
- GEC Alstom NBA P50001A (ISO 32, 46) and NBA P50003A (ISO 32)
- General Electric GEK 27070, GEK 28143A, GEK 28143B, GEK 32568C, GEK 32568E, GEK 32568F, GEK 32568J, GEK 46506D, GEK 46506E
- ISO 6743/5 (L-TSA, L-TGA, L-TGB)
- ISO 8068 L-TGB, L-TSA, L-TGA, L-TGSB (ISO 32, 46, 68)
- JIS K-2213 Type 2
- MAG Cincinnati, Cincinnati Machine P-38 (ISO 32), P-55 (ISO 46), and P-54 (ISO 68)
- Siemens Industrial Turbomachinery MAT 81 21 01 (ISO 32) and 81 21 02 (ISO 46)
- Solar ES 9-224, Class II (ISO 32, 46)

Available as ISOCLEAN® Certified to meet specific OEM ISO Cleanliness specifications.

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.

Regal® R&O ISO 22, 32, 46, 68, 100, 115, 150, 220, 320, 460, 680

Regal R&O delivers excellent value in steam and hydroelectric turbines. It provides thermal and oxidation stability which can yield long lubricant life. It has good water release, air release and rust protection. Regal R&O ISO 32 through ISO 150 viscosities are recommended for use in most electric motor bearings, air compressors, gears, hydroelectric turbines, steam turbines, marine turbines and non heavy-duty hydraulic systems where the OEM recommends an R&O of the appropriate viscosity. The ability for this product to be used in a wide range of applications can help simplify inventory.

Regal R&O ISO 32, 46, 68 and 100 meet the requirements of:

- ASTM D 4304 Type I
- BS 489-1999
- Cincinnati Machine P-38, P-55, P-54
- DIN 51515 Part 1 L-TD
- General Electric GEK 27070, GEK 28143A, GEK 28143B, GEK 46506D, GEK 46506E
- JIS K-2213 Type 2
- Siemens MAT - 81 21 01 (ISO 32) and 81 21 02 (ISO 46)
- Siemens Power Generation TLV 9013 04 (ISO 32, 46)
- Solar ES 9-224, Class II

Available as ISOCLEAN® Certified to meet specific OEM ISO Cleanliness specifications.

Regal® SGT 22

Our premium performance, synthetic polyolester-based turbine lubricant is recommended for use in modified aviation-type gas turbines in industrial and marine service requiring an ISO 22 viscosity. It is designed for modified aviation-type gas turbines exposed to the most severe operating environment in non-aviation applications, such as industrial power generation and marine propulsion. The excellent oxidation and thermal stability of the synthetic polyol ester and balanced additive package contributes to a long service life. Minimal coking tendency helps prevent deposit formation on bearings and other areas exposed to extreme heat. High load carrying capability helps protect against wear. Regal SGT 22 is compatible with other lubricants approved under MIL–PRF–23699G. It is compatible with metals, paints, coatings and elastomers such as Viton, Teflon, Fluorosilicone and Buna N (NBR).

Regal SGT 22 is approved for:

- General Electric LM 2500 models
- Rolls Royce (Allison) 501K
- U.S. Military MIL-PRF-23699G, Class STD

Regal SGT 22 meets the requirements of:

- General Electric (D50 TF-1) LM 500, 1600, 5000, 6000 models
- General Electric CF34-3 to General Electric CF34-10 LM ground gas turbines (all models)
- Rolls Royce Avon, Olympus, Tyne, (Derby) RB 211
- Turbomeca Artouste, Astazou, Bastan, Arriel, Arrius, Makila

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.