

SHELL TURBO® Oil TX 32

High quality industrial steam and gas turbine oil

SHELL TURBO® Oil TX 32 has been developed to meet the exacting demands of modern steam and gas turbine applications. SHELL TURBO® Oil TX 32 oil is formulated from premium quality hydrotreated base oils and a combination of ashless additives that provide excellent oxidative stability, protection against rust and corrosion, low foaming and excellent demulsibility.

Performance Features and Benefits

• Strong Control of Oxidation

The use of inherently oxidatively stable base oils together with an effective antioxidant package provides high resistance to oxidative degradation. The result is extended oil life, minimizing the formation of potentially damaging corrosive acids, deposits and sludge.

• High Resistance to Foaming and Rapid Air Release

The oil is formulated with a non-silicone anti-foam additive which controls foam formation and rapidly collapses any foam formed. This feature coupled with fast air-release from the lubricant reduces the possibility of problems such as pump cavitation, breakdown of hydrodynamic lubrication, premature oil oxidation and excessive wear.

• Positive Water-shedding properties

Robust demulsibility control such that excess water, common-place in steam turbines, can be drained easily from the lubrication system, minimizing corrosion and premature wear.

• Excellent Rust and Corrosion Protection

Prevents the formation of rust and guards against onset of corrosion ensuring protection for equipment following exposure to humidity or water during operation and during shut-downs.

Main Applications

SHELL TURBO® Oil TX is available in ISO grade 32 and is suited for application in the following areas:

- Non-geared industrial steam turbines
- Non-geared industrial gas turbines
- Numerous applications where rust and oxidation control is required

Advice on applications not covered in this handbook may be obtained from your Shell representative.

Specifications, Approvals, and Recommendations

The performance of SHELL TURBO® Oil TX 32 oil meets or exceeds a number of major steam and gas turbine manufacturer lubricant specifications including:

- General Electric GEK 28143A, 32568F, GEK 46506D
- Westinghouse 21T0591, 55125Z3
- Deutsche Industrie Norm DIN 51515-1
- Alstom HTGD 90-117 (T)
- Solar ES 9-224 Revision W
- Siemens TLV 9013 04
- ASTM D4304, type I

Handling and Safety Information

For information on the safe handling, storage, or use of this product, refer to its Material Safety Data Sheet at <http://www.epc.shell.com/>. If you are a Shell Distributor, please call 1+800-332-6457 for all of your service needs. All other customers please call 1+800-237-8645 for all of your service needs.

Protect the Environment

Do not discharge into drains, soil, or water.

Typical Physical Characteristics

SHELL TURBO® Oil TX	ISO VISCOSITY GRADE 32
Viscosity (ASTM D445) cSt @ 40°C cSt @ 100°C	32 5.5
Pour Point °C (°F) (ASTM D5950)	-12 (10)
Flash Point - COC (ASTM D92, °C (°F))	221 (430)
Total Acid Number (ASTM D974, mg KOH/g)	0.15
Copper Corrosion (ASTM D130, 100°C/3hr)	1a
Rust Control (ASTM D665B)	Pass
Oxidation Control Tests- A) TOST Life (ASTM D943, hr) B) RPVOT (ASTM D2272, min)	>10,000 >1,600

These characteristics are typical of current production. While future production will conform to Shell specifications, variation in these characteristics may occur.