Mobil DTE 832

Superior Performance Turbine Oils

Product Description

Mobil DTE 832 is a superior performance turbine oil designed for use in steam turbines, gas turbines and combined cycle gas turbine (CCGT) applications under the most severe operating conditions. This progressive product is based on high quality hydrotreated basestocks for exceptional thermal/oxidation resistance along with specially chosen additives engineered to provide the deposit control and "keep-clean" performance required by severe duty gas turbines as well as excellent water separability needed for steam turbine operation. The formulation also includes a non-zinc antiwear system to meet the load carrying requirements of geared turbines.

In addition to meeting the separate requirements of modern steam and gas turbine designs, Mobil DTE 832 is an excellent choice for combined cycle applications that require a single oil for a gas turbine and a steam turbine run in tandem. Simultaneously meeting both deposit control and water separation requirements is the key performance highlight of this advanced lubricant technology. The excellent thermal/oxidative resistance of Mobil DTE 832 ensures that it can be operated in the most severe turbine environments.

The performance features of Mobil DTE 832 translates into excellent equipment protection, reliable operation, with reduced down-time and extended oil charge life. This product also provides the ultimate flexibility to the operator because they can be used in all turbine types: steam, gas and geared-turbines.

Features and Benefits

Mobil DTE brand mineral-based products have been the choice for turbine operator's world-wide for more than one hundred years. During that period our company's scientists have maintained the strongest ties with turbine equipment builders and operators to ensure that the needs of new turbine designs are met or exceeded by our lubricants. This has required a continual upgrading of Mobil turbine oils and the application of the most appropriate modern base oil and additive technology

For modern stationary gas turbines that operate at high power outputs, exceptional protection against thermal/oxidative degradation and deposit control are key requirements. Severe operation causes thermal stressing of the lubricant that can result in filter plugging, servo valve deposits or short oil life. For modern steam turbines, a high level of oxidation resistance is required as well as good water separability in cases of steam leaks. For combined cycle operation, it is necessary for the lubricant to meet the needs of both turbine types

DTE 832 oil offers the following features and potential benefits:

Features	Advantages and Potential Benefits
Meets or exceeds both gas turbine and steam turbine requirements of key builders	Avoids lube misapplication and costly change-out
	Reduces inventory costs
Excellent thermal/oxidation stability	Reduced downtime, more reliable operation
	Extended oil charge life; lower product costs
Excellent antiwear protection	Excellent protection for geared turbines (gas- and steam-), lower maintenance and replacement costs

Features	Advantages and Potential Benefits
	Extended equipment protection and reduced replacement costs
Excellent demulsibility	Efficient system operation and reduced maintenance

Applications

Mobil DTE 832 is a superior performance turbine oil designed for use in steam and gas turbine oil systems, direct- or gear-coupled and turbine speed control mechanisms. Specific applications include:

- Combined cycle (CCGT) electric power generation applications including those with a common circulation system for the steam turbine and gas turbine.
- Lubrication of steam turbine or gas turbine units used for electric power generation, natural gas pipeline transmission, process operations and cogeneration plants.

Specifications and Approvals

Mobil DTE 800 Series meets or exceeds the following industry specifications	**832**
JIS K2213 Type 2	X
DIN 51515-1 L-TD	X
DIN 51515-2 L-TD	X
GE GEK 28143A	X
Solar ES 9-224, Class 11	X
GE GEK 32568-E/F	X
Quality level GE GEK 101941-A	X
Quality level GE GEK 32568-C	X
Meets GE GEK 107395	X
Meets Alstom Power Sweden 812108	X
Meets Alstom Power Sweden 812109	X

Mobil DTE 800 Series has the following builder approvals	**832**
Alstom Power HTGD 90 117	X
Siemens TLV 9013 04	X

Typical Properties

Mobil DTE 800 Series	**832**
ISO Viscosity Grade	32
Viscosity, ASTM D 445	
cSt @ 40ºC	29.6
cSt @ 100ºC	5.4
Viscosity Index, ASTM D 2270	110

Mobil DTE 800 Series	832
Pour Point, ºC, ASTM D 97	-30
Flash Point, ºC, ASTM D 92	224
Specific Gravity 15.60C,ASTM D 4052	0.86
TOST, ASTM D 943, Hours to 2 NN	10,000+
RBOT, ASTM D 2272, min.	1200
FZG Scuffing, DIN 5182, A/8.3/90, ›Fail Stage	9
Rust Prevention, ASTM D 665, Distilled Water Sea Water	Pass Pass
Water Seperability, ASTM D 1401,Min. to 0 ml emulsion @ 54ºC	15
Copper Strip Corrosion, ASTM D 130, 3 hrs @ 100ºC	1A
Foam Test, ASTM D 892, Seq I, II and III Tendency/stability, ml/ml	20/0

Precautions

MOBIL DTE 832 is manufactured from high quality petroleum base stocks, carefully blended with selected additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact to skin, splashing into the eyes, ingestion or vapour inhalation. Please refer to our Imperial Oil Material Safety Data Sheet for further information.

Note: This product is not controlled under Canadian WHMIS legislation.