Mobil

Mobil SHC™ 800 Ultra Series

Mobil Industrial , Finland

Superior High Performance Turbine Oils

Product Description

Mobil SHC™ 832 and 846 Ultra are superior high performance turbine oils designed for use in steam turbines, gas turbines, combined cycle gas turbine (CCGT) and turbo compressor applications under the most severe operating conditions.

Modern stationary gas turbines operate at high power output and severe operation causes thermal stressing of lubricant that can result in bearing deposits, filter plugging, servo-valve deposits and valve sticking or short oil life. Mobil SHC 800 Ultra Series have been specifically formulated to provide exceptional protection against thermal/oxidative degradation and outstanding keep-clean performance with specific deposit and varnish control.

Mobil SHC 800 Ultra Series also feature the exceptional interfacial properties, in particular steam and water separation, required for modern high performance steam turbines. Mobil SHC 800 Ultra Series strong anti-wear performance is designed to meet load-carrying requirements of geared turbines.

Features and Benefits

The performance features of Mobil SHC 800 Ultra Series oils translate into excellent equipment protection, reliable operation, with reduced down-time and extended oil life. These products also provide the ultimate flexibility to the operator due to the extensive use in a wide variety of turbine types.

Mobil SHC 800 Ultra Series oils offer the following features and potential benefits:

Features	Advantages and Potential Benefits
Reduced varnish/deposit formation potential	▪ Offering potential reduction in unscheduled shut-downs and helps reduce maintenance of hydraulic system components ▪ Helps reduce deposits in high speed centrifugal and axial compressor journal bearings ▪ Helps increase reliability of supply of energy
Helps reduce downtime and increase operation reliability	▪ Helps extend oil life enabling lower lubricant costs ▪ Helps reduce downtime and increase operation reliability
Strong anti-wear protection	▪ Helps protect geared gas and steam turbines ▪ Helps reduce maintenance and replacement costs
Excellent water and steam separation	▪ Supports efficient system operation and reduced maintenance
Meets or exceeds key builder requirements for both gas and steam turbines	▪ Provides flexibility to operators ▪ Avoids lube misapplication and costly change-out

Applications

Mobil SHC 832 and 846 Ultra are superior high performance turbine oils designed for use in steam turbines, gas turbines, combined cycle gas turbine (CCGT) and turbo compressor applications under the most severe operating conditions.

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Specifications and Approvals

This product has the following approvals:	MOBIL SHC 832 ULTRA	MOBIL SHC 846 ULTRA
MAN Energy Solutions Oberhausen (Heritage MAN D&T) 10000494596 - Rev. 02	X	X
Siemens TLV 9013 04	X	X
Siemens TLV 9013 05	X	X

This product is recommended for use in applications requiring:	MOBIL SHC 832 ULTRA	MOBIL SHC 846 ULTRA
GE Power GEK 28143B	X	X

This product meets or exceeds the requirements of:	MOBIL SHC 832 ULTRA	MOBIL SHC 846 ULTRA
ASTM D4304, Type I (2017)	X	X
ASTM D4304, Type II (2017)	X	X
ASTM D4304, Type III (2017)	X	X
Baker Hughes Nuovo Pignone ITN 52220.05	X	X
China GB 11120-2011, L-TGA	X	X
China GB 11120-2011, L-TGE	X	X
China GB 11120-2011, L-TGSB	X	X
China GB 11120-2011, L-TGSE	X	X
China GB 11120-2011, L-TSA(Class A)	X	X
China GB 11120-2011, L-TSA(Class B)	X	X
China GB 11120-2011, L-TSE	X	X
DIN 51515-1:2010-02	X	X
DIN 51515-2:2010-02	X	X
GE Power GEK 101941A	X	
GE Power GEK 107395A	X	
GE Power GEK 121608	X	

This product meets or exceeds the requirements of:	MOBIL SHC 832 ULTRA	MOBIL SHC 846 ULTRA
GE Power GEK 32568Q	X	
GE Power (former Alstom Power) HTGD 90117	X	X
JIS K-2213 Type 2	X	X
Siemens Industrial Turbo Machinery MAT 812101	X	
Siemens Industrial Turbo Machinery MAT 812102		X
Siemens Industrial Turbo Machinery MAT 812106	X	
Siemens Industrial Turbo Machinery MAT 812107		X
Siemens Industrial Turbo Machinery MAT 812108	X	
Siemens Industrial Turbo Machinery MAT 812109		X
Solar Turbines ES 9-224, Class II	X	X

Properties and Specifications

Property	MOBIL SHC 832 ULTRA	MOBIL SHC 846 ULTRA
Grade	ISO 32	ISO 46
Air Release Time, 50 C, min, ASTM D3427	1	2
Copper Strip Corrosion, 3 h, 100 C, Rating, ASTM D130	1B	1B
Density @ 15.6 C, g/ml, ASTM D4052	0.83	0.84
Emulsion, Time to 40/37/3, 54 C, min, ASTM D1401	5	10
FZG Scuffing, Fail Load Stage, A/8.3/90, ISO 14635-1	10	10
Flash Point, Cleveland Open Cup, °C, ASTM D92	266	284
Foam, Sequence I, Stability, ml, ASTM D892	0	0
Foam, Sequence I, Tendency, ml, ASTM D892	0	0
Foam, Sequence II, Stability, ml, ASTM D892	0	0
Foam, Sequence II, Tendency, ml, ASTM D892	0	0
Foam, Sequence III, Stability, ml, ASTM D892	0	0
Foam, Sequence III, Tendency, ml, ASTM D892	0	0
Kinematic Viscosity @ 100 C, mm2/s, ASTM D445	6.4	7.7
Kinematic Viscosity @ 40 C, mm2/s, ASTM D445	33.9	46.4
Pour Point, °C, ASTM D97	-42	-33

Property	MOBIL SHC 832 ULTRA	MOBIL SHC 846 ULTRA
Rotating Pressure Vessel Oxidation Test, min, ASTM D2272	3700	3200
Rust Characteristics, Procedure A, ASTM D665	PASS	PASS
Rust Characteristics, Procedure B, ASTM D665	PASS	PASS
Turbine Oil Stability Test, Life to 2.0 mg KOH/g, h, ASTM D943	>10000	>10000
Viscosity Index, ASTM D2270	140	135

Health and Safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.aspx

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com
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