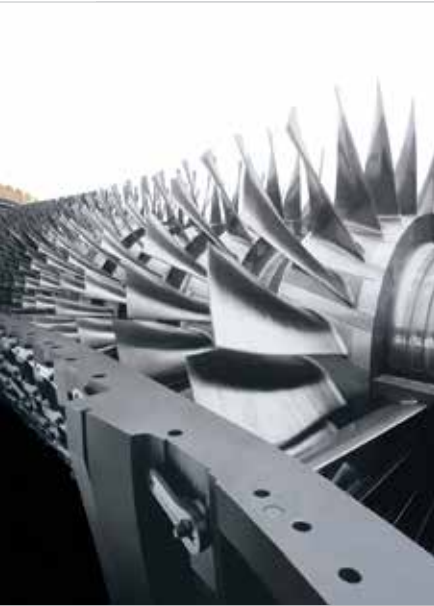




Mobil DTE™ 800 Series

Maximum protection and performance for gas and steam turbines



The key to your plant's productivity is to keep things running smoothly.

As part of the power-generation industry, you face performance-critical decisions that directly impact that productivity — and your plant's bottom line. This is especially true when it comes to selecting turbine lubricants. Without proper protection, turbine operation can suffer, causing unscheduled downtime and maintenance.

That's where Mobil DTE 800 Series turbine oils come in.

You can help protect your turbines from costly problems — such as stresses from extreme temperatures, sludge and varnish deposits, corrosion, water contamination, and the catalytic effect of system metals.

Specialized lubricants ideal for combined-cycle applications.

Mobil DTE 800 Series lubricants have been specially developed for high-output gas and steam turbines, making them ideal for combined-cycle applications. They are specifically formulated to help keep equipment clean and provide long filter and equipment life. The result of more than 100 years of expertise and innovation in power-generation lubrication technology, Mobil™-branded turbine oils are recognized by the industry for delivering outstanding product performance.

Meets demanding new GE GEK 107395A specification.

Owing to its ability to simultaneously deliver exceptional deposit control and water separation properties vital for combined-cycle applications, GE has listed Mobil DTE™ 832 for use in its high-efficiency, 520-megawatt H System (S109H).

High-Performance Benefits

Combined-cycle capacity

Mobil DTE™ 832 and Mobil DTE™ 846 perform ideally in both gas and steam turbines, helping reduce inventory and storage costs.

Extended oil-life formulation

Even in high-temperature gas turbine applications, Mobil DTE™ 800 Series oils resist oxidation and deposit formation, helping improve uptime by enabling extended oil drain capability.

Enhanced load carrying capacity

Provides outstanding protection in geared turbine applications, which helps to reduce wear and extend component life.

Excellent demulsibility, air release, and resistance to foaming

Readily releases air and separates quickly from water to help reduce the risk of rust, corrosion, sludge formation, and oxidation.

Mobil DTE™ 800 Series — Performance

Mobil DTE™ 832 extends oil life of GE Frame 7 Turbine and helps Petrochemical Company save over US \$23,000*.

**Petrochemical Company
Louisiana, USA
GE Frame 7 Turbine**

Benefit

Use of Mobil DTE 832 enabled a chemical plant to save US \$23,000 in operating and maintenance costs by approximately doubling typical oil life in a GE Frame 7 turbine.

Situation

A large chemical plant in Louisiana operates one of their GE Frame 7 turbines (80 MW) using Mobil DTE 832 and routine oil analysis.

Impact

Use of Mobil DTE 832 extended oil life by approximately twice what is typically experienced in similar applications. This type of product performance — over 10 years without an oil change — illustrates outstanding performance and long drain interval that exceeded normal industry standards. This performance has extended equipment operating life (sustained peak turbine performance over the 10 years) and reduced maintenance costs (no unscheduled outages).

Duke Energy International saves AU \$75,000 annually with Mobil DTE 832*.

**Duke Energy International — Longford Compression Station — Victoria, Australia
Two Solar Taurus Gas Turbine Compressor sets**

Benefit

Total savings from lubricant oil cost alone was AU \$75,000 a year without factoring in savings associated with filtration and cost of machine parts.

Situation

Oil analysis showed that the competitive oil had poor foaming property and low RPVOT of 200 minutes. Oil was changed five times over the first eight months, resulting in frequent unscheduled shutdowns in both units. Filter usage was high and waste oil disposal was a problem. The oil cost was AU \$90,000 for the first eight months of operation.

Impact

Both units were drained and flushed thoroughly before filling with Mobil DTE 832. The results: no emergency or unscheduled shutdowns; destructive vibrations were eliminated; oil usage has decreased significantly and oil life extended to more than 5,000 operating hours; oil analysis showed both foaming stability and RPVOT at acceptable levels.

Equipment Builder and Industry Recognition

Mobil DTE™ 800 Series meets or exceeds the following industry specifications:	Mobil DTE™ 832	Mobil DTE™ 846
Alstom Power HTGD 90 117	A	A
DIN 51515-1:2010-02	X	X
DIN 51515-2:2010-02	X	X
GE GEK 101941A	X	
GE GEK 107395A	X	
GE GEK 28143A	X	X
GE GEK 32568E	X	
GE GEK 32568G	X	
GE GEK 46506D	X	
JIS K-2213 Type 2, with additives (2006)	X	X
Siemens TLV 9013 04	A	A
Siemens TLV 9013 05	A	A
Siemens Industrial Turbomachinery MAT 81 21 01/ 81 21 06/ 81 21 08	X	
Siemens Industrial Turbomachinery MAT 81 21 02/ 81 21 07/ 81 21 09		X
Siemens Westinghouse PD-55125Z3	X	
Solar ES 9-224, Class II	X	X

X = Meets, A = Approved

Please refer to the equipment builder manual for final lubrication recommendation.

For more information on Mobil DTE™ 800 Series and other Mobil™-branded industrial lubricants and services, please contact your local company representative or visit mobilindustrial.com.

*The Proofs of Performance used herein are based on the experience of a single customer. Actual results can vary depending upon the type of equipment used and its maintenance, operating conditions and environment, and any prior lubricant used.

Health and Safety.

Based on available information, this product is not expected to produce adverse effects on health when used for the applications referred to above and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contact office or via the Internet. This product should not be used for purposes other than the applications referred to above. If disposing of used product, take care to protect the environment.