

# Mobil Jet Oils

## Equipment Builder Reference Guide

### Description

The following reference guide has been compiled from excerpts taken from the 64th edition of the Mobil Equipment Builder Book. The information was sorted wherever Mobil Jet Oils were referenced for builder applications.

If additional data is needed, please contact your assigned technical representative or the appropriate Help Desk.

#### ■ ABB STAL AB

Finspang, Sweden

#### "POWER-PAK" STAND-BY UNITS

Gas generator bearings — "Avon"      Mobil Jet Oil II  
Pratt & Whitney  
or Rolls-Royce

#### ■ ACEC

9000 Gent, Belgium

#### WORTHINGTON TURBO-JET<sup>1</sup>

20 and 40 MW      Mobil Jet Oil II  
Generator

<sup>1</sup> Out of production.

#### ■ ROLLS ROYCE — ALLISON ENGINE COMPANY, INC.

Indianapolis, Indiana, United States  
*Formerly Allison Engine Company, Inc.;*  
*Formerly Allison Turbine Division General Motors Corp.*

#### ALLISON TURBINE ENGINE DRIVEN GAS COMPRESSOR AND ELECTRIC GENERATOR<sup>1</sup>

Series 501-D13 and 501-D22  
and 501-K, 570 KA, KC, KF  
(Turbine and Reducer Drive), 601K  
All parts

Mobil Jet Oil II,  
Mobil Jet Oil 254

<sup>1</sup> The following engines have the following Allison Codes: D—Aircraft Engines, A—Generator Engines, C—Pumper Engines, F—Marine Engines, K—Industrial Engines, K-5 and K-13 Series are Natural Gas Engines. K-14 and K-15 Series are Liquid Fuel Engines. Mobil SHC 824 is approved for Industrial Natural Gas Fueled applications only.

#### ■ BECKMAN INSTRUMENTS

Spinco  
Palo Alto, CA, United States

#### CENTRIFUGES

Ultra Centrifuge Drive Assemblies	Reservoir	Mobil DTE 24, Mobil 1 Formula 5W-30, Mobil Jet Oil 254, Mobil SHC 626
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#### ■ CENTRAX LIMITED

Gas Turbine Division  
Newton Abbot, United Kingdom

#### GAS TURBINE DRIVEN GENERATING SETS

Centrax Models: 501; KB3; KB5;  
KB7; 570; 571  
Gas Turbine, Alternator and Gearbox      Mobil Jet Oil II

## ■ COMPAIR REAVELL LTD.

An Invensis Company  
Ipswich, United Kingdom

### RECIPROCATING AIR COOLED COMPRESSORS

Models: 5206A, 5208A, 5402  
Crankcase & Cylinders Mobil Jet Oil II,  
Mobil Rarus 427<sup>1</sup>

<sup>1</sup> Restricted duties only — temperature limitations dependent upon model — refer to EB Department, MOCL.

## ■ COOPER CAMERON CORPORATION

Cooper Energy Services Division  
Mount Vernon, OH, United States

### COBERRA GAS TURBINES

Oil Inlet Temperature — Severe Duty

125°F (51.7°C) to 145°F (62.8°C) Mobil SHC 825  
Fire Resistant Fluid Mobil Pyrogard 53  
Rolls Royce Gas Engine Mobil Jet Oil II,  
Mobil Jet Oil 254<sup>1</sup>

<sup>1</sup> Check operators manual for recommended lubricant.

## ■ DANA CORPORATION

Warner Electric Industrial Products Division  
Warren, MI, United States

### OVERRUNNING, BACKSTOPPING, HOLDBACK AND INDEXING CLUTCHES

-40°F to 150°F Mobil Jet Oil II,  
Avrex S, Turbo 256

## ■ DELTA RESEARCH CORPORATION

Livonia, MI, United States

### SPECIAL ENGINEERED TRANSMISSIONS

Enclosed Gears — High Speed Mobil DTE 24<sup>1</sup>,  
Mobil Jet Oil II,  
Mobil Jet Oil 254,  
Mobil Aero HF

<sup>1</sup> Builder uses Mobil DTE 24 for test.

## ■ DRESSER FRANCE

Le Havre, France  
*Multiple recommendation*

### CLARK GAS TURBINES

Rolls-Royce Jet Engines Circulation Mobil Jet Oil II

## ■ DRESSER-RAND COMPANY

Turbo Products  
Olean, NY, United States

### GAS TURBINES

Gas Generator Oil System Mobil Jet Oil II

## ■ ELLIOTT ENERGY SYSTEMS, INC.

Stuart, FL, United States  
Subsidiary of Elliott Company

### TA SERIES TURBO ALTERNATORS

Bearings Circulation Mobil SHC 824,  
Mobil Jet Oil II,  
Avrex S Turbo 256

## ■ GENERAL ELECTRIC COMPANY

Schnectady, NY, United States

### GAS TURBINES

Models LM 1600, LM 2500, Mobil Jet Oil II<sup>1</sup>  
LM 5000, LM 6000 (Aircraft  
Derived Gas Turbines)

<sup>1</sup> When applications involving severe low and/or high temperatures are apparent, contact Equipment Builder Department for consultation with GE engineering personnel.

## ■ GENERAL ELECTRIC COMPANY

Aircraft Derivative Gas Turbines  
Cincinnati, OH, United States

### GAS TURBINES

Mobil LM 1600<sup>1</sup> Avrex S Turbo 256

Models LM 2500, 5000, 6000 Avrex S Turbo 256,  
Mobil Jet Oil II,  
Mobil Jet Oil 254

Model LM 500 Mobil Jet Oil II,  
Mobil Jet Oil 254

<sup>1</sup> Model LM 1600 requires a MIL-L-7808 approved lubricant.

## ■ HITACHI SHIPPING YARD CORPORATION

Sakurajima Plant  
Sakurajima, Konohana-ku, Osaka, Japan  
(Hitachi Zosen K.K.)

### GAS TURBINE GENERATOR

GT-10-1, -2, GT 12 and GT 15  
(GM Allison License)  
Gear and Bearings      Circulation      Mobil Jet Oil II

## ■ INGERSOLL RAND FRANCE

Ingersoll Rand France  
Trappes, France  
*Multiple recommendation*

### GYRO-FLO COMPRESSORS (MOBILE VANES) SPIRO-FLO COMPRESSORS (SCREW TYPE) SUPER SPIRO-FLO COMPRESSORS (SCREW TYPE)

Compressor      Circulation  
Below -23°C      Mobil Jet Oil II

### GAS TURBINES<sup>1</sup>

Allison generator,      Circulation      Mobil Jet Oil II  
Ingersoll Rand compressor

<sup>1</sup> Current models: Mobil Jet Oil II for the Allison generator. Mobil DTE Oil Light for the compressor part (special considerations).

## ■ INGERSOLL-RAND COMPANY

Rotary Drill  
Garland, TX, United States

### BLASTHOLER — SELF-PROPELLED

DM20SP, DM25SP, DM35SP,  
DM25SPH, DM35SPH, PTO  
Series (Discontinued) 5, 7, 9

Screw Compressors      MIL-L-23699B      Mobil Jet Oil II

## ■ KAWASAKI HEAVY INDUSTRIES, LTD.

Motorcycle Division  
Akashi Hyogo-ken, Japan  
Kawasaki, Jukogyo K.K.

Their developed ATV will be manufactured at their US Plant in Lincoln, Nebraska and will be exported into European and Asia Pacific markets from 2001.

### GAS GENERATOR

Bearings      Circulation      Mobil Jet Oil II

## ■ KAWASAKI Heavy Industries, Ltd.

Akashi, Hyogo-ken, Japan  
Akashi Minami Works  
(Kawasaki Jukogyo K.K.)

### GAS TURBINE GENERATOR

#### PU Series

Turbine, Compressor and      Circulation      Mobil Jet Oil II  
Generator Bearings

## ■ KNORR-BREMSE SYSTEME FUR SCHIENENFAHRZEUGE GMBH

80809 Munchen, Germany

### PISTON COMPRESSORS IN RAIL CARS

Outside temperature      Oil filled  
Below -15°C      Mobil Jet Oil II

## ■ KOBE STEEL, LTD.

Takasago, Hyogo-ken, Japan  
Takasago Rotating Machinery Plant  
(K.K. Kobe Seikoshu)

### GAS TURBINE GENERATOR

#### KGT Series (GM, Allison, License)

Compressor and Turbine      Circulation      Mobil Jet Oil II  
Bearings, Reduction Gears

## ■ KVAERNER ENERGY A.S., THERMAL POWER

Thermal Power  
Oslo, N., Norway  
Kvaerner  
(Gas turbine power generation sets)

### GAS TURBINE POWER GENERATION SETS<sup>1</sup>

Gas Turbine, General      Circulation System  
Electric LM 6000, LM 2500+,  
LM 2500, LM 2000, LM 1600

All Conditions      Mobil Jet Oil II

<sup>1</sup> Please refer to relevant builder in MEBS for detailed information on each of the components of the generator set.

## ■ KVAERNER ENERGY A.S., THERMAL POWER *(continued)*

### **AERO DERIVATE GAS TURBINES**

#### **LM 2500-5000**

Turbine separate	Dir.	Mobil Jet Oil II <sup>1</sup>
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<sup>1</sup> Due to variations in the viscosity--demands depending on the construction of the plant, contact builder in each case.

## ■ MOBILE DRILLING INC.

Indianapolis, IN, United States

### **DRILLS**

B-61 Safe-T Driver Hoist Clutch (Formsprag HPI-300)		Mobil Jet Oil II
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B-31, B-47 Safe-T Driver Hoist B-53, B-80		Mobil Jet Oil II
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Safe-T Driver Hoist (Formsprag HPI-500)		Mobil Jet Oil II
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## ■ SOLAR TURBINES

Division of Caterpillar, Inc.  
San Diego, CA, United States

### **GAS TURBINES AND GEAR UNITS<sup>1,2</sup>**

Class III - Synthetic Esters

MIL-L-23699 -54°F to 110°F		Mobil Jet Oil II, Mobil Jet Oil 254
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<sup>1</sup> See Solar Engineering Specification ES9-244 for additional information pertaining to type, grade, and ambient temperature limits.

<sup>2</sup> Synthesized Hydrocarbon is the preferred lubricant recommendation for all units unless designed specially for fire resistant synthetic ester base fluids.

### **MERCURY TURBINE, ANTI FRICTION BEARING EQUIPPED**

Main Oil System, all temps	Reservoir	Mobil Jet Oil II, Mobil Jet Oil 254
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## ■ SUNDSTRAND CORPORATION

Advanced Technology  
Rockford, IL, United States  
(NOT IN NEXT BOOK)

### **AIRCRAFT CONSTANT SPEED ALTERNATOR DRIVE**

#### **CSD Unit**

Hydraulic Fluid	Mobil Jet Oil II <sup>1</sup>
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<sup>1</sup> Check with Builder if Mobil Jet Oil 254 is requested.

## ■ SUNDSTRAND POWER SYSTEMS

Division of Sundstrand Aerospace Corp.  
San Diego, CA, United States  
*(Formerly Sundstrand Turbomach)*

### **GAS TURBINES**

Gemini, Titan, Spartan (Obsolete)<sup>1</sup>

#### **Radial Gas Turbines**

Main Oil Reservoir	Mobil SHC 824 <sup>2</sup> , Mobil Jet Oil II, Mobil DTE Oil Light, Mobil DTE 797, Mobil DTE 724 Oil
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<sup>1</sup> These models were previously produced by Solar Turbines, San Diego, CA.

<sup>2</sup> Mobil SHC 824 is preferred for all units unless designed specifically for fire resistant or synthetic ester based fluids. Mobil Jet Oil II is approved for Gemini and Titan with proper seals and hoses.

## ■ ULSTEIN TURBINE AS

Bergen, Norway

### **EURODYN 1M1 MARINE PROPULSION GAS TURBINE**

#### **Turboshaft Engine**

Non integrated gear	Mobil Jet Oil 254
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Integrated gear	See Footnote <sup>1</sup>
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<sup>1</sup> Turbine tested and developed with Mobil Jet Oil 291, product preferentially recommended by Ulstein Turbine.