



LM6000 Equipment Package Description

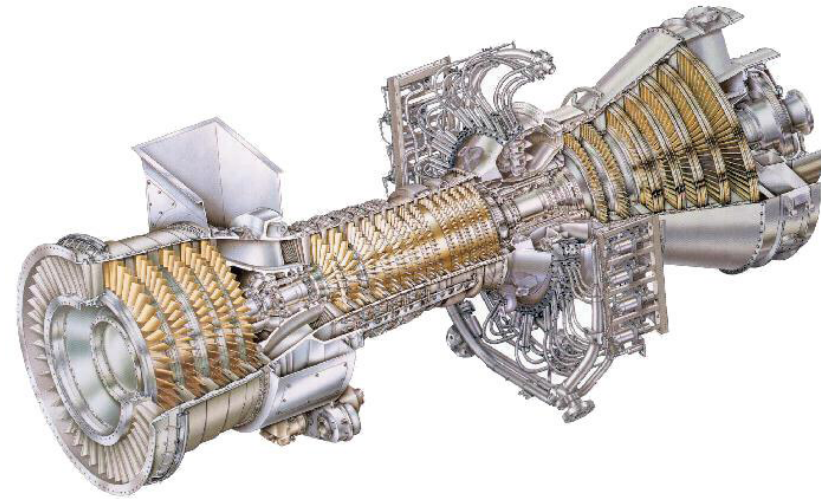
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Revision : 25th Feb. 2014

Context

LM6000 now available for sale !

- LM6000 engine is coupled with a generator and is equipped with a heat recovery boiler. The power plant works perfectly until it was turn off in March 2013.

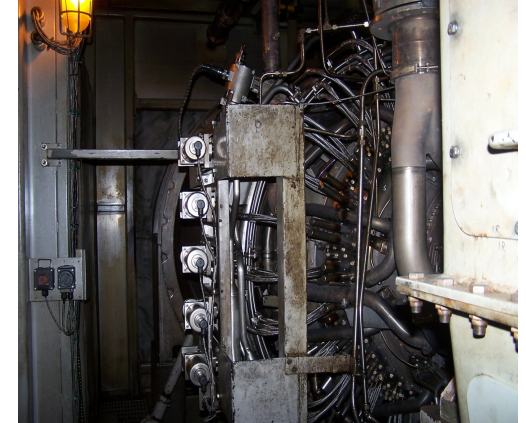
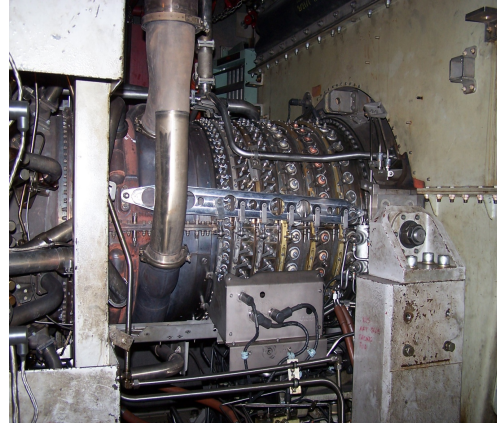


Main information

Description of the LM6000 for sale : 7LM6000-PD-NGD03 S/ N192.148

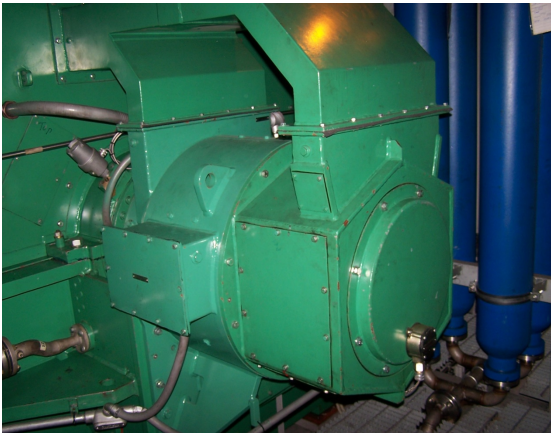
- Commissioning date : November 2001
- Package Hours: 45 388 hours
- Engine running hours : 45 388 hours

Year	Last Availability rate
2009/2010	99,6%
2010/2011	95,5%
2011/2012	100%
2012/2013	98,6%



■ Generator

- Running hours : 45 388 hours
- Manufacturer: BRUSH (FKI Rotating Machines)
- Output 53500Kva
- R/min 3000
- Volts 11500 Amps=3188
- Turbo generator type : BDAX7-290ERJT 50Hz
- Machine N° 904118.010
- N° de series 904118
- CustN° 27674829
- Part numb: 31767200



■ Reductor

- running hours : 45 388 hours
- Manufacturer: FLENDER GRAFFENSTADEN
- Ref : STEWART/STEVENSEN 655211
- Type : TX61/1CV N°5713
- Power : 52200KW
- Speed : 3627/3000
- Weight : 13500kg

Technical data

This section lists the general descriptions , capacities, and capabilities for the gas turbine-generator set including associated support systems.

■ Engine

- **Manufacturer : General Electric**
- **Model N° 7LM600-PD**
- **Type : Gas turbine**
- **Engine Weight : 13 270 lb**
- **Operating Speed :**
 - **LP Rotor : 3600 rpm**
 - **HP Rotor : 10 200 rpm**
- **Start System : Hydraulic.**

■ Ignition Exciter

- **Manufacturer : Unison**

■ Generator

- **Manufacturer : FKI Rotating Machines**
- **Type : Air-cooled**

■ Turbine Hydraulic Starter System

- **Manufacturer : Sunstrand**
- **Hydraulic Reservoir capacity : 40gal**
- **Charge pump : 56gpm @5200 psig**
- **Starter Motor : ABB motors**
- **(200-hp, 400-VAC, 3Φ, 50-Hz)**
- **Hydraulic Fluid: Recommendations in manual.**

■ Ventilation and Combustion Air System

- **Air Filtration System : ALTAIR**
- **Turbine Ventilation Fans : TCF Aerovent** (2 fans – 1 operates, 1 is on standby, 60,000 scfm each)
- **Generator Ventilation Fans : TCF Aerovent** (2 fans – 1 operates, 1 is on standby, 39,000 acfm each)
- **Silencers :**
 - Air inlet Silencer Manufacturer : ALTAIR
 - Turbine Room Vent Fans Silencer Manufacturer : TCF AEROVENT
 - Variable Bypass Valve Silencer Manufacturer : VAW
 - Generator Exhaust Silencer Manufacturer : VAW

■ Gas Fuel System

- **Input required : Natural Gaz, 400MMBtu/hr, max**
- **Supply pressure : 655 – 695 psig**
- **Supply Temperature : 250°F, max**
- **Fuel Filter 3μ, absolute**

■ Gas Fuel Flow – Control Valve : WOODWARD

■ Generator Lube Oil System

- **Reservoir Capacity : 3000 gal**
- **Generator Lube Oil Supply Filters :**
 - Rating : 6μ, absolute
 - Manufacturer : PALL
- **Generator / Gearbox Lube Oil Heat Exchangers**
 - Cooling : Fin /Fan
 - Manufacturer : Thermal Mechanical
- **AC Lube Oil Pump : LEISTRITZ**

■ Turbine Lube Oil System

- **Reservoir Capacity : 150 gal**
- **Turbine Lube Oil Supply Filters :**
 - Rating : 6μ, absolute
 - Manufacturer : PALL
- **Turbine Lube Oil Heat Exchangers**
 - Cooling : Fin /Fan
 - Manufacturer : Thermal Mechanical

■ Turbine Hydraulic System

- **Prime Mover** : Direct connection to turbine accessory gearbox
- **Internal Relief Valve Setting on Hydraulic Supply Pump** : 800 psig
- **Filters Rating** : 3 μ , absolute

■ Fire Suppression and Gas Detection System :

- **Manufacturer** : WILSON FIRE EQUIPMENT & SERVICE COMPANY, Inc
- **Fire Suppressant** : CO2 gas
- **Thermal Spot Detectors** : 225°F and 450°F plus rate of rise
- **Optical Flame Detectors** : Dual-frequency infrared 90° view cone
- **Combustible Gas Detector** : Methane

■ Turbine Water Wash System

- **Water Supply Pressure** : 15 – 65 psig
- **Tank Capacity** : 100 gal
- **Instrument Air Pressure** : 80- 120 psig filtered to 3 μ , absolute
- **Detergent**: Added in solution with water wash in proportion, as specified by manufacturer of detergent
- **Antifreeze** : Isopropyl Alcohol, Methyl Ethyl Ketone (MEK) or Acetone, detergent manufacturer must specify which of these is compatible with detergent

■ Control System

- **Fuel Control /Sequencer** : WOODWARD
- **Automatic Voltage Regulator (AVR)** : FKI ROTATING MACHINES
- **Vibration Monitor** : BENTLY NEVADA

Appendices

List of the Appendices

- Borescope Inspection report April 2012
- Borescope Inspection report July 2013
- Technical inspection report July 2013
- Shop Visit report June 2012

