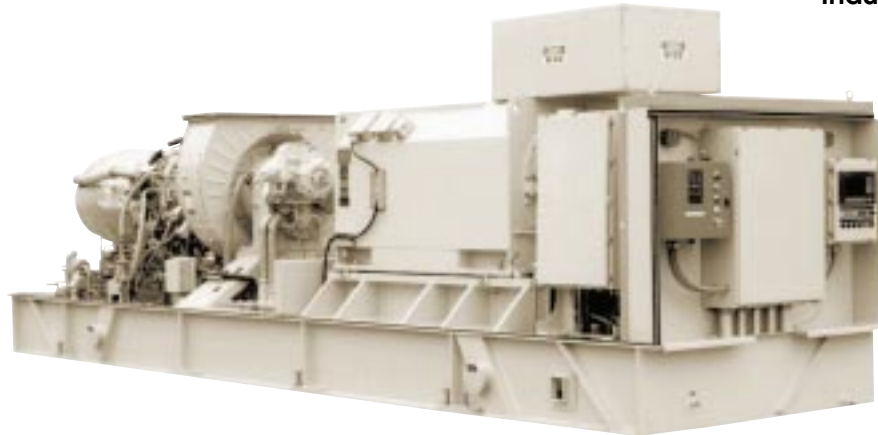


Industrial/Utility Grade



Features

- Industrial Gas Turbine Package
- Compact, Integrated Package Providing Ease of Installation
- Factory Tested
- Dry, Low Emission (*SoLoNOx*[™]) Combustion Available
- Onskid Microprocessor-Control with Auto Sync Capability
- Multiple Fuel Capability

Package Arrangement

Gas Turbine

- *Centaur*[®] 50 Industrial, Single-Shaft
- Axial Compressor – 11 Stages
- Annular Combustion Chamber
 - 12 Fuel Injectors
- Coatings
 - Compressor: Inorganic Aluminum
 - Turbine and Nozzle Blades: Precious Metal Diffusion Aluminide
- Proximity Probe Vibration Transducers

Main Reduction Drive

- Epicyclic
 - 1800 or 1500 rpm
 - Acceleration Vibration Transducers

Generator

- Salient Pole, 3 Phase, 6 Wire, Wye Connected, Synchronous with Brushless Exciter
- Open Drip-Proof Construction
- Sleeve Bearings
- Velocity Vibration Transducers
- Solid-State Voltage Regulation with Permanent Magnet Generator
- NEMA Class F Insulation with F Rise
- Continuous Duty Rating

Package

- Steel Base Frame with Drip Pans
- Direct-Drive AC Start System
- Natural Gas Fuel System

- Control System
 - Microprocessor-Based PLC
 - Generator Control
 - Vibration and Temperature Monitoring
 - Auto Synchronizing
- Integrated Lube Oil System
 - Turbine-Driven Lube Pump
 - AC Pre/Post Lube Pump
 - Backup Lube Pump
 - Air/Oil Cooler
 - Integral Lube Oil Tank
 - Lube Oil Tank Heater
 - Lube Oil Filter
- Documentation
 - Drawings
 - Quality Control Data Book
 - Inspection and Test Plan
 - Test Reports
 - O&M Manuals
- Factory Testing of Turbine and Package

Optional Equipment/Services

- Generator Options:
 - WPII, TEWAC
 - Standby Duty Rating
 - Standard Voltages: 3300, 6600, 11,000 50 Hz; 4160, 6900, 12,470, 13,800 60 Hz
- Fuel Systems
 - Liquid
 - Dual (Gas/Liquid)

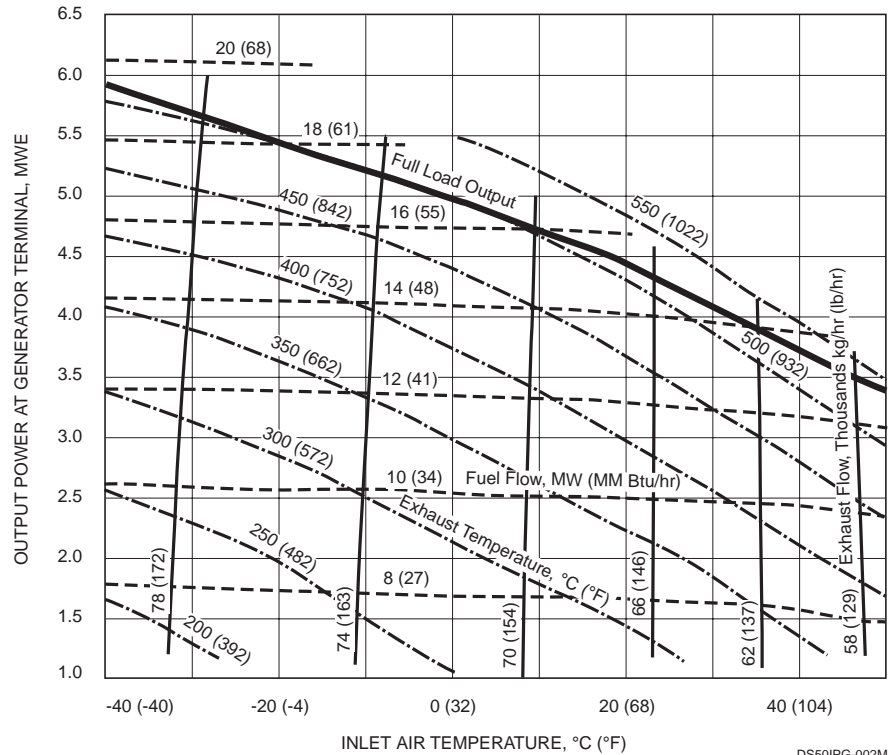
- *SoLoNOx*, Dry, Low Emission
- Alternate Fuels (such as naphtha, propane, low Btu)
- Lube Oil System
 - Water/Oil Lube Cooler
 - Electrostatic Demister
 - Duplex Lube Oil Filters
- Control System
 - Remote Display/Control Terminal
 - Heat Recovery Application Interface
 - Serial Link Supervisory Interface
 - KW Control
 - KVAR/Power Factor Control
 - Turbine Performance Map
 - Historical Displays
 - Printer/Logger
 - Predictive Emissions Monitoring
 - Field Programming Terminal
- Accessory Equipment
 - 24-VDC Battery/Charger System
 - Turbine Cleaning System: On-Crank and On-line
 - Package Lifting Kit
- Weatherproof Acoustic Enclosure
- Ancillary Equipment: Various Air Inlet and Exhaust Systems
 - Inlet and Exhaust Silencers
 - Self-Cleaning or Prefilter/Barrier Air Inlet Filter
 - Inlet Evaporative Cooler
 - Inlet Chiller Coils
 - Ancillary Support Frame

Nominal Performance*

Output Power, kW ISO: 15°C (59°F), sea level	4600
Heat Rate, kJ/kWe-hr (Btu/kWe-hr)	12 269 (11,628)
Exhaust Flow, kg/hr (lb/hr)	68 680 (151,410)
Exhaust Temperature, °C (°F)	509 (949)

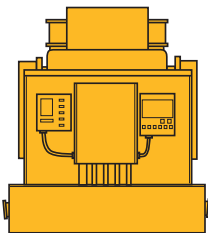
* No inlet or exhaust losses
Relative humidity 60%
Natural gas fuel with
LHV = 31.5 to 43.3 MJ/nm³
(800 to 1100 Btu/scf)

Available Performance

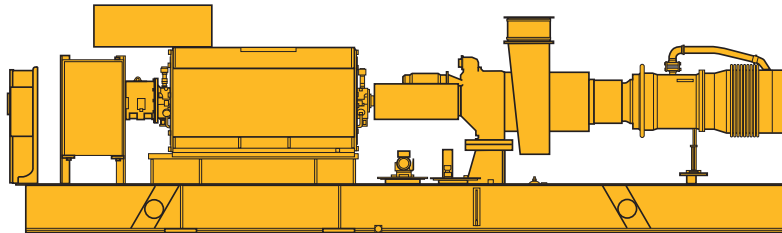


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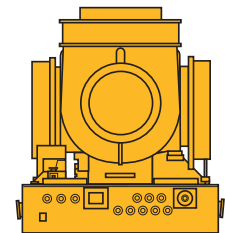
Typical Service Connections



Forward End



Left Side



Aft End

DS50IPG-003M

Forward End

- Turbine Control Box

Length:	9754 mm (32' 0")
Width:	2438 mm (8' 0")
Height:	2591 mm (8' 6")
Approx. Weight:	27 430 kg (60,470 lb)

Left Side

- Lube Oil: Drain, Vent, Cooler
- Generator Control Box, Power
- Generator Drip Pan Drain
- AC Power
 - Lube Tank Heater
 - Pre/Post Lube Pump
 - Backup Lube Pump

Right Side

- AC Power - Start Motor
- Generator Monitor Box

Aft End

- Fuel Inlet
- Turbine Cleaning
- Fuel Filter, Combustor and Exhaust Collector Drains
- Auxiliary Air (optional) for:
 - Liquid Fuel Atomizing
 - Self-Cleaning Filter
- AC Power
 - Liquid Fuel Pump (optional)
- Package Ground

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