General Specifications
Titan™ 130 Gas Turbine
• Industrial, Two-Shaft
• Axial Compressor
  – 14-Stage
  – Variable Inlet Guide Vanes and Stators
  – Pressure Ratio: 17.5:1
  – Inlet Airflow: 56.1 kg/sec (123.8 lb/sec)
  – Vertically Split Case
• Combustion Chamber
  – Annular-Type, Conventional or Lean-Premixed, Dry, Low Emission (SoLoNOx™)
  – 21 Fuel Injectors (Conventional)
  – 14 Fuel Injectors (SoLoNOx)
  – Torch Ignitor System
• Gas Generator Turbine
  – 2-Stage, Reaction
  – Max. Speed: 11,220 rpm
  – Thrust Bearing, Active: Tilting-Pad
  – Thrust Bearing, Inactive: Fixed Tapered Land
• Power Turbine
  – 2-Stage, Reaction
  – Max. Speed: 8820 rpm
  – Full Tilting-Pad Thrust Bearing
• Journal Bearings
  – Tilting-Pad
• Coatings
  – Compressor: Inorganic Aluminum
  – Turbine and Nozzle Blades: Precious Metal Diffusion Aluminide
• Vibration Transducer Type
  – Proximity Probes

Key Package Features
• Driver Skid with Drip Pans
• 316L Stainless Steel Piping ≤4” dia.
• Compression-Type Tube Fittings
• Digital Display Panel
• Electrical System Options
  – NEC, Class I, Group D, Div 1, or Div 2
  – ATEX, Zone 2
  – CENELEC, Zone 1
• Turbotronic™ Microprocessor Control System
  – Onskid Control System (Div 2 or ATEX, Zone 2)
  – Freestanding Control Console
  – Color Video Display
  – Vibration Monitoring
• Control Options
  – 120-VDC Accessory Battery/Charger System
  – Gas Turbine and Package Temperature Monitoring
  – Serial Link Supervisory Interface
  – Turbine Performance Map
  – Compressor Performance Map
  – Historical Displays
  – Printer/Logger
  – Remote Monitoring and Diagnostics Option
  – Process Controls
  – Compressor Anti-Surge Control
  – Field Programming
• Start Systems
  – Pneumatic
  – Direct-Drive AC
• Natural Gas Fuel System
• Integrated Lube Oil System
  – Turbine-Driven Accessories
  – AC Motor-Driven Accessories
• Oil System Options
  – Oil Cooler
  – Oil Heater
  – Tank Vent Separator
  – Flame Trap
• Package Skid Design
  – Accommodates Mars® and Titan Turbines
  – Optional Modifications for Floating Production Applications
• Axial Compressor Cleaning Systems
  – On-Crank
  – On-Crank/On-Line
  – Portable Cleaning Tank
• Gearbox (if applicable)
  – Speed Increaser
  – Speed Decreasers
• Air Inlet and Exhaust System Options (Carbon or Stainless Steel)
• Enclosure and Associated Options
• Factory Testing of Turbine and Package
• Documentation
  – Drawings
  – Quality Control Data Book
  – Inspection and Test Plan
  – Test Reports
  – Operation and Maintenance Manuals
**Performance**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Power</td>
<td>17,500 kW (23,470 hp)</td>
</tr>
<tr>
<td>Heat Rate</td>
<td>9620 kJ/kW-hr (6800 Btu/hp-hr)</td>
</tr>
<tr>
<td>Exhaust Flow</td>
<td>202,140 kg/hr (445,640 lb/hr)</td>
</tr>
<tr>
<td>Exhaust Temp.</td>
<td>480°C (895°F)</td>
</tr>
</tbody>
</table>

Nominal rating – per ISO
At 15°C (59°F), at sea level
No inlet/exhaust losses
Relative humidity 60%
Natural gas fuel with
LHV = 35 MJ/nm³ (940 Btu/scf)
Optimum power turbine speed
AC-driven accessories
Engine efficiency: 37.4%

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**Package Dimensions**

Length: 9.8 m (32' 0")
Width: 3 m (10’)
Height: 3.7 m (12' 3”)
Typical Weight: 36,540 kg (80,560 lb)

*Driver package only, dry weight, unenclosed height

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**Available Power**

- **Output Power**
  - 19,500 kW (26,150 hp)
  - 18,000 kW (24,140 hp)
  - 16,500 kW (22,130 hp)
  - 15,000 kW (20,120 hp)
  - 13,500 kW (18,100 hp)

- **Heat Rate**
  - 10.3 MJ/kW-hr (7280 Btu/hp-hr)
  - 10.1 MJ/kW-hr (7140 Btu/hp-hr)
  - 9.9 MJ/kW-hr (7000 Btu/hp-hr)
  - 9.7 MJ/kW-hr (6860 Btu/hp-hr)
  - 9.5 MJ/kW-hr (6710 Btu/hp-hr)

INLET AIR TEMPERATURE, °C (°F)

Output Power

HEAT RATE, MJ/kW-hr (Btu/hp-hr)

FOR MORE INFORMATION

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