General Specifications
Taurus™ 70 Gas Turbine
• Industrial, Two-Shaft
• Axial Compressor
  – 14-Stage
  – Variable Inlet Guide Vanes
  – Pressure Ratio: 16.2:1
  – Inlet Airflow: 26.8 kg/sec (59.1 lb/sec)
  – Vertically Split Case
• Combustion Chamber
  – Single Annular-Type
  – Conventional or Lean-Premixed, Dry, Low Emission (SoLoNOx™)
  – 12 Fuel Injectors
  – Torch Ignitor System
• Gas Producer Turbine
  – 2-Stage, Reaction
  – Max. Speed: 15,200 rpm
• Power Turbine
  – 2-Stage, Reaction
  – Max. Speed: 11,600 rpm
• Bearings
  – Journal and Thrust: Tilt Pad
• Coatings
  – Compressor: Inorganic Aluminum
  – Turbine Blades and Nozzles: Precious Metal Diffusion Aluminide
• Vibration Transducer Type
  – Proximity Probes
  – Velocity Transducer

Key Package Features
• Base Frame with Drip Pans
• Driven Equipment Base Frame
  – Compressor
  – Compressor Auxiliary Systems
• 316L Stainless Steel Piping <4"
• Compression-Type Tube Fittings
• Digital Gauge Panel
• Electrical System Options
  – NEC, Class I, Group D, Div. 1 or 2
  – CENELEC, Zone 1 or 2
• Turbotronic™ Microprocessor Control System
  – Offskid or Onskid
  – Video Display Unit
  – Temperature and Vibration Monitoring
  – Historical Displays
• Control Options
  – Auxiliary Control Interface or Auxiliary Control Console (with onskid controls)
  – Remote Control and Display
  – 120-VDC Control Battery/Charger
  – Supervisory Communications Interface
  – Turbine Performance Map
  – Printer/Logger
  – Field Programming
  – Process Controls
  – Compressor Performance Map
  – Compressor Anti-Surge Control
• CE/ATEX Zone 2 Certification
• Start Systems
  – Pneumatic
  – Direct Drive AC
• Fuel System
  – Natural Gas
• Integrated Lube Oil System
  – Turbine-Driven Accessories
  – Tank Vent Separator
  – Flame Trap
• Oil System Options
  – Oil Cooler
  – Oil Heater
• Compressor Cleaning System Options
  – On-Crank/On-Line
  – Cleaning Tank
• Gearbox (if applicable)
  – Speed Increaser
• Air Inlet and Exhaust System Options
• Enclosure and Associated Options
• Factory Testing of Turbine with Package and Compressor
• 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>8290 kW (11,110 hp)</td>
</tr>
<tr>
<td>Heat Rate</td>
<td>10 170 kJ/kW-hr (7190 Btu/hp-hr)</td>
</tr>
<tr>
<td>Exhaust Flow</td>
<td>96 500 kg/hr (212,740 lb/hr)</td>
</tr>
<tr>
<td>Exhaust Temp.</td>
<td>500°C (935°F)</td>
</tr>
</tbody>
</table>

Nominal Rating – ISO
- At 15°C (59°F), sea level
- No inlet/exhaust losses
- Relative humidity 60%
- Natural gas fuel with LHV = 35 MJ/m³ (940 Btu/scf)
- Optimum power turbine speed
- AC-driven accessories
- Engine efficiency: 35.4%

**Package Dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>7.7 m (25' 3&quot;)</td>
</tr>
<tr>
<td>Width</td>
<td>2.6 m (8' 8&quot;)</td>
</tr>
<tr>
<td>Height</td>
<td>3.3 m (10' 9&quot;)</td>
</tr>
<tr>
<td>Typical Weight</td>
<td>24 495 kg (54,000 lb)</td>
</tr>
</tbody>
</table>

*Driver package only, dry weight, unenclosed height