General Specifications

Taurus™ 60 Gas Turbine

• Industrial, Two Shaft
• Axial Compressor
  – 12 Stage
  – Variable Inlet Guide Vanes
  – Pressure Ratio: 12.2:1
  – Inlet Airflow: 21.3 kg/sec (47.0 lb/sec)
  – Vertically Split Case
• Combustion Chamber
  – Annular Type
  – Conventional or Lean-Premixed, Dry, Low Emission (SoLoNOx™)
  – 12 Fuel Injectors
  – Torch Ignitor System
• Gas Producer Turbine
  – 2 Stage, Reaction
  – Max. Speed: 15,000 rpm
• Power Turbine
  – 2 Stage, Reaction
  – Max. Speed: 14,300 rpm
• Bearings
  – Journal: Tilting Pad
  – Thrust, Active: Tilting Pad
  – Thrust, Inactive: Fixed Tapered Land
• Coatings
  – Compressor: Inorganic Aluminum
  – Turbine Nozzles and Blades: Precious Metal Diffusion Aluminide
• Vibration Transducer Type
  – Velocity
  – Proximity Probes

Key Package Features

• Driver Skid with Drip Pans
• Driven Equipment Skid
  – Compressor
  – Compressor Auxiliary Systems
• 316L Stainless Steel Piping ≤ 4"
• Compression-Type Tube Fittings
• Electrical System Options
  – NEC Class I, Group D, Div. 1
  – CENELEC Zone 1
• Turbotronic™ Microprocessor
  Control System
  – Freestanding Control Console
  – Color Video Display
  – Vibration Monitoring
• Control Options
  – 120-VDC Control Battery/Charger System
  – Gas Turbine and Package
  – Temperature Monitoring
  – Serial Link Supervisory Interface
  – Turbine Performance Map
  – Compressor Performance Map
  – Historical Displays
  – Printer/Logger
  – Process Controls
  – Compressor Anti-Surge Control
  – Field Programming
• Start Systems
  – Pneumatic
  – Direct Drive AC

• Fuel System: Natural Gas
• Integrated Lube Oil System
  – Turbine-Driven Accessories
• Oil System Options
  – Oil Cooler
  – Oil Heater
  – Tank Vent Separator
  – Flame Trap
• Axial Compressor Cleaning Systems
  – On-Crank
  – On-Crank/On-Line
  – Stationary Cleaning Tank
• Gearbox (if applicable)
  – Speed Increaser
  – Speed Decreasers
• Air Inlet and Exhaust System Options
• 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 Instruction Manual
### Performance

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Power</td>
<td>5740 kW (7700 hp)</td>
</tr>
<tr>
<td>Heat Rate</td>
<td>11,265 kJ/kW-hr (7965 Btu/hp-hr)</td>
</tr>
<tr>
<td>Exhaust Flow</td>
<td>77,880 kg/hr (171,690 lb/hr)</td>
</tr>
<tr>
<td>Exhaust Temp.</td>
<td>510°C (950°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: 32%

### Package Dimensions*

- **Length:** 6.0 m (19' 9")  
- **Width:** 2.5 m (8' 1")  
- **Height:** 2.7 m (8' 11")  
- **Typical Weight:** 15,420 kg (34,000 lb)

*Driver package only, dry weight, unenclosed height