

General Specifications

Taurus™ 70 Gas Turbine

- Industrial, Two-Shaft
- Axial Compressor
 - 14-Stage
 - Variable Inlet Guide Vanes
 - Pressure Ratio: 16.5:1
 - Inlet Airflow:
26.2 kg/sec (57.7 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: 12,000 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 ControlNet 1.5
 - 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

Output Power	8320 kW (11,150 hp)
Heat Rate	10 170 kJ/kW-hr (7190 Btu/hp-hr)
Exhaust Flow	97 970 kg/hr (215,990 lb/hr)
Exhaust Temp.	500°C (935°F)

Nominal Rating – ISO
At 15°C (59°F), sea level

No inlet/exhaust losses

Relative humidity 60%

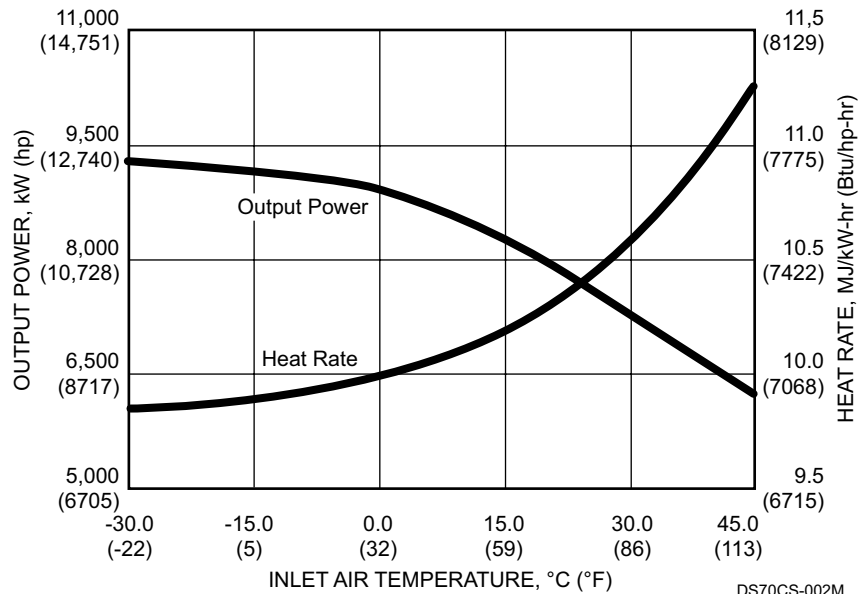
Natural gas fuel with
LHV = 35 MJ/nm³ (940 Btu/scf)

Optimum power turbine speed

AC-driven accessories

Engine efficiency: 35.4%

Available Power



DS70CS-002M

Package Dimensions*

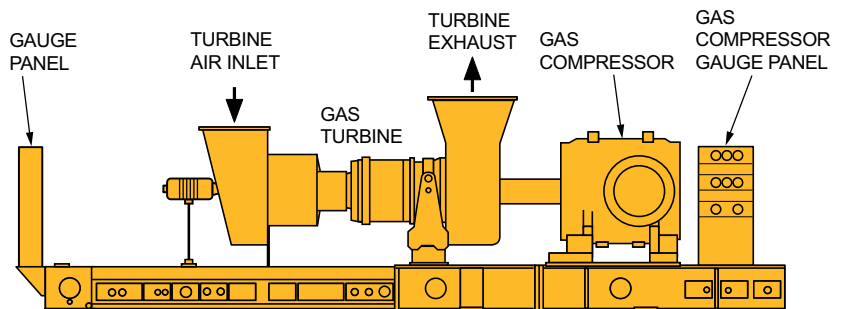
Length: 7.7 m (25' 3")

Width: 2.6 m (8' 8")

Height: 3.3 m (10' 9")

Typical Weight: 24 495 kg (54,000 lb)

*Driver package only, dry weight,
unenclosed height



DS70CS-003M