

The Solar® C85 gas compressor is designed for applications with the Titan™ 250 gas turbine. This compressor combines high efficiency and wide flow range with a robust design and ease of restaging.

The C85 gas compressors have the latest state-of-the-art technology combined with the experience and reliability that comes with building and installing over 5000 compressors. These compressors are designed in compliance with API 617, a requirement for the severe environments and operating conditions this equipment may encounter.



**C85 Gas Compressor**

dsc85\_001



**Typical C85 Rotor**

dsc85\_002

### Typical Weights and Dimensions

Length	3.2 m (10' 8")
Height	3.0 m (9' 10")
Width	3.8 m (12' 4")
Weight	72 575 - 77 111 kg (160,000 - 170,000 lb)

### Key Features

Number of Stages	1 - 2
Seals	Tandem dry gas
Bearings	Journal: Tilting-pad Thrust: Self-equalizing, tilting-pad
Inlet/Discharge Flanges	42/42 in. Class 900
Efficiency	> 89% isentropic
Maximum Speed	7000 rpm
Maximum Flow	1274 m <sup>3</sup> /min (45,000 acfm)
Maximum Total Head	108 kJ/kg (36,000 ft-lbf/lb <sub>m</sub> )
Maximum Casing Press.	11 030 kPag (1600 psig)
Maximum Torque	79 090 Nm (700,000 lb <sub>f</sub> -in.)
Instrumentation	Fully instrumented with vibration, temperature, and pressure monitoring per API 617
Vibration Limits	Within API 617

### Materials

Impeller	15-5 PH
Casing	ASTM A216 GR WCC
Diaphragm/Guide Vane	ASTM A36
Rotor Spacer	AISI 410
Stub Shafts	AISI 4140
Labyrinth Seals	Steel-backed Babbitt

### Operation Range (Pressure vs. Flow)

