

The Solar® C16 family of gas compressors is designed for applications with the Saturn® 20, Centaur® 40, Centaur 50, Taurus™ 60, Taurus 70, Mars® 90, Mars 100 and Titan™ 130 gas turbines. These compressors combine high efficiency and wide flow range with a robust design and ease of restaging.

The C16 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.



dsc16_001

C16 Gas Compressor



dsc16_002

Typical C16 Rotor

Typical Weights and Dimensions	
Length	1.2 - 1.3 m (4' 1" - 4' 2")
Height	0.7 - 0.8 m (2' 4" - 2' 7")
Width	0.7 - 1.1 m (2' 4" - 3' 10")
Weight	1996 - 2540 kg (4400 - 5600 lb)

Key Features

Number of Stages	1 - 10
Seals	Double ring oil or tandem dry gas
Bearings	Journal: Tilting-pad Thrust: Self-equalizing, tilting-pad
Inlet/Discharge Flanges	8/8 in. Class 1500
Efficiency	> 75% isentropic
Maximum Speed	23,800 rpm
Maximum Flow	62 m ³ /min (2200 acfm)
Maximum Total Head	209 kJ/kg (70,000 ft-lbf/lbm)
Maximum Casing Press.	24 130 kPag (3500 psig)
Maximum Torque	3920 Nm (34,700 lbf-in.)
Instrumentation	Fully instrumented with vibration, temperature, and pressure monitoring per API 617
Vibration Limits	Within API 617

Materials

Impeller	AISI 410
Casing	ASTM A216 GR WCC
Diaphragm/Guide Vane	ASTM A395
Rotor Spacer	AISI 410
Stub Shafts	AISI 4140
Labyrinth Seals	Steel-backed Babbitt

Operation Range (Head vs. Flow)

