

The Solar® C40 family of multi-stage gas compressors is designed for applications with the *Centaur*® 40, *Centaur* 50, *Taurus*™ 60, *Taurus* 70, *Mars*® 90, *Mars* 100, *Titan*™ 130 and *Titan* 250 gas turbines. These compressors combine high efficiency and wide flow range with a robust design and ease of restaging.

The C40 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.



**C40 Gas Compressor**

dsc40\_001



**Typical C40 Rotor**

dsc40\_002

### Typical Weights and Dimensions

Length	1.8 - 2.0 m (5' 9" - 6' 7")
Height	1.1 m (3' 9")
Width	1.7 m (5' 8")
Weight	10 070 - 12 066 kg (22 200 - 26 600 lb)

### Key Features

Number of Stages	1 - 6
Seals	Tandem dry gas
Bearings	Journal: Tilting-pad Thrust: Self-equalizing, tilting-pad
Inlet/Discharge Flanges	16/16 in. Class 900 16/16 in. Class 1500
Efficiency	> 85% isentropic
Maximum Speed	14,300 rpm
Maximum Flow	269 m <sup>3</sup> /min (9500 acfm)
Maximum Total Head	239 kJ/kg (80,000 ft-lbf/lbm)
Maximum Casing Press.	13 790 kPag (2000 psig) and 17 235 kPag (2500 psig) models
Maximum Torque	14 690 Nm (130,000 lbf-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 A487/AISI 4140
Rotor Spacer	AISI 410
Stub Shafts	AISI 4140
Labyrinth Seals	Steel-backed Babbitt

### Operation Range (Head vs. Flow)

