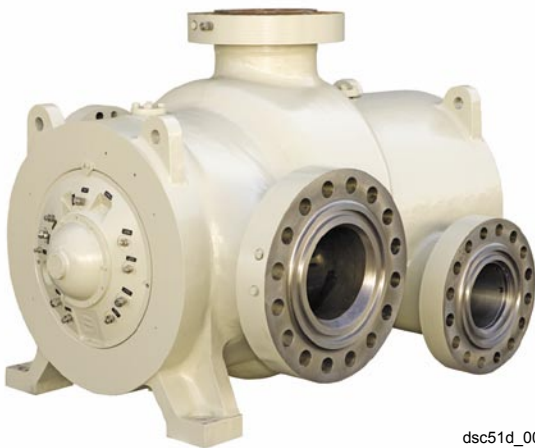


The Solar® C51 dual compartment gas compressor is designed for applications with the *Taurus*™ 60, *Taurus* 70, *Mars*® 90, *Mars* 100, *Titan*™ 130 and *Titan* 250 gas turbines. This compressor uses intercooling and combines high efficiency and wide flow range with a robust design and ease of restaging.

C51 dual compartment 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.



dsc51d_001

C51 Dual Compartment Gas Compressor



dsc51d_002

Typical C51 Rotor

Typical Weights and Dimensions

Length	2.4 m (7' 11")
Height	1.9 m (6' 5")
Width	2.3 m (7' 8")
Weight	25 628 - 27 669 kg (56,500 - 61,000 lb)

Key Features

Number of Stages	1 - 10
Seals	Tandem dry gas
Bearings	Journal: Tilting-pad Thrust: Self-equalizing, tilting-pad
Inlet/Discharge Flanges	20/12 in. Class 1500 (Primary) 16/16 in. Class 1500 (Secondary)
Efficiency	> 85% isentropic
Maximum Speed	12,000 rpm
Maximum Flow	623 m ³ /min (22,000 acfm)
Maximum Total Head	>269 kJ/kg (90,000 ft-lbf/lbm)
Maximum Casing Press.	20 685 kPag (3000 psig)
Maximum Torque	31 070 Nm (275,000 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 516/A36
Rotor Spacer	Type 410
Stub Shafts	AISI 4140
Labyrinth Seals	Steel-backed Babbitt

Operation Range (Head vs. Flow)

