Solar® Turbines
A Caterpillar Company

C61
Production Gas Compressors

Oil and Gas Applications

The *Solar*® C61 family of gas compressors is designed for applications with the *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 C61 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.

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C61 Gas Compressor

Typical C61 Rotor

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Typical Weights and Dimensions

Length	2.7 - 3.3 m (8' 10" - 10' 9")
Height	1.9 m (6' 4")
Width	2.6 m (8' 8")
Weight	28 213 - 37 784 kg (62,200 - 83,300 lb)

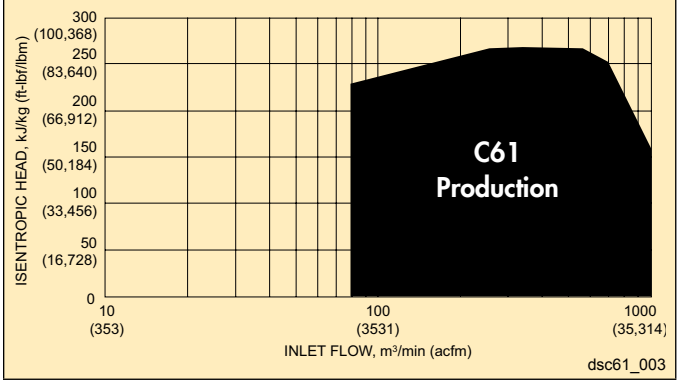
Key Features

Number of Stages	1 - 10
Seals	Tandem dry gas
Bearings	Journal: Tilting-pad Thrust: Self-equalizing, tilting-pad
Inlet/Discharge Flanges	30/24 in. Class 900 24/20 in. Class 1500
Efficiency	> 85% isentropic
Maximum Speed	10,200 rpm
Maximum Flow	991 m^3/min (35,000 acfm)
Maximum Total Head	269 kJ/kg (90,000 ft-lb_f/lb_m)
Maximum Casing Press.	15 515 kPag (2250 psi) and 20 685 kPag (3000 psi) models
Maximum Torque	61 215 Nm (541,800 lb_f-in.)
Instrumentation	Fully instrumented with vibration, temperature, and pressure monitoring per API 617
Vibration Limits	Within API 617

Materials

Impeller	15 - 5 PH E2 and E3: 15 - 5 PH < 8050 rpm E2 and E3: Titanium 8050 - 10,200 rpm
Casing	ASTM A216 GR WCC
Diaphragm/Guide Vane	ASTM 516/A36
Rotor Spacer	AISI 410
Stub Shafts	AISI 4140
Labyrinth Seals	Steel-backed Babbitt

Operation Range (Head vs. Flow)



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For More Information

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