

# C41 DUAL COMPARTMENT PRODUCTION GAS COMPRESSORS

The Solar® C41 dual compartment gas compressor is designed for applications in the upstream production market and is ideally suited to be driven by a gas turbine or alternatively by an electric motor.

With its dual compartment design, the process gas can be cooled and a gas side stream can be added prior to the gas entering the second compartment of the C41. This compressor offers a wide flow range and high pressure ratio capability while maintaining a reduced package footprint.

The C41 dual compartment shares the robust design and ease of restage features of other Solar gas compressor models. Additionally, within a single casing the bearing span is adjustable to optimize rotordynamic performance via our variable position endcap design.

The compressor is designed in compliance with API 617, a requirement for the severe environments and operating conditions this equipment may encounter.

C41 Dual Compartment Gas Compressor



C41 Dual Compartment Rotor 407-407



C41 Dual Compartment Rotor 407-427



## Typical Weight and Dimensions

Length	2.41 m (7 ft. 11 in.)
Height	2.13 m (7 ft.)
Width	2.97 m (9 ft. 9 in.)
Weight	27,270 kg (60,000 lb)

## Key Features

Number of Stages	2-12
Bearings	Journal: Tilting pad Thrust: Self-aligning, tilting pad
Inlet/Discharge Flanges	1st Compartment: 20/14 in. Class 1500 2nd Compartment: 14/14 in. Class 1500
Efficiency	72-85% polytropic
Maximum Speed	13,200 rpm
Maximum Flow	225 m <sup>3</sup> /min (9000 acfm)
Maximum Head per Stage	45 kJ/kg (15,000 ft-lbf/lbm)
Maximum Casing Pressure	25 860 kPag (3750 psig)
Maximum Torque	20 900 Nm (185,000 lbf-in.)
Instrumentation	Fully instrumented with vibration temperature and pressure monitoring per API 617
Vibration Limits	Within API 617

# Solar® Turbines

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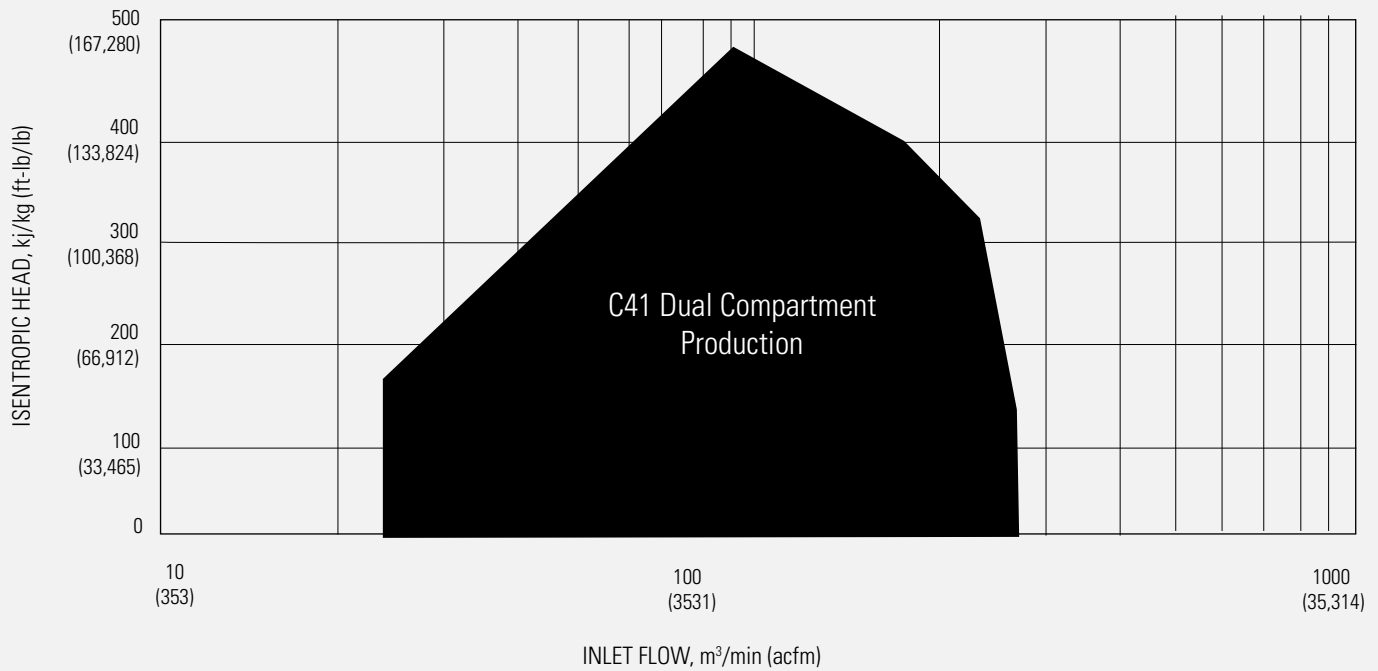
## Materials

Impellers	15-5 PH
Casing	ASTM A216 GR WCC
Diaphragm/Guide Vane	ASTM A516
Rotor Spacer	AISI 410
Stub Shafts	AISI 4140
Labyrinth Seals	Steel-backed Babbitt

C41 Dual Compartment Sectional View



## Operation Range (Head vs. Flow)



### Additional Information:

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