

# Solar® Turbines

A Caterpillar Company

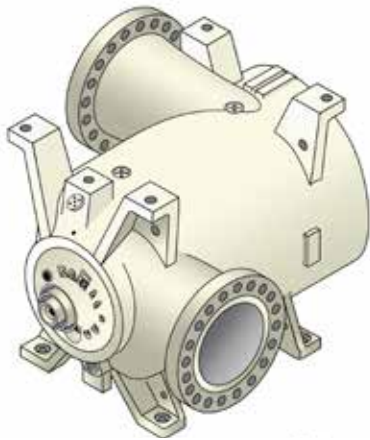
# C75

## Pipeline Gas Compressors

Oil and Gas Applications

The Solar® C75 gas compressor is designed for applications with the Titan™ 130 and Titan 250 gas turbines. The compressor combines high efficiency and wide flow range with a robust design and ease of restaging.

The C75 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.



dsc75\_001

**C75 Gas Compressor**



dsc75\_002

**Typical C75 Rotor**

### Typical Weights and Dimensions

|        |                            |
|--------|----------------------------|
| Length | 2.4 - 2.8 m (7'10" - 9'2") |
| Height | 2.7 m (8' 8")              |
| Width  | 3.2 m (10' 6")             |
| Weight | 61,235 kg (135,000 lb)     |

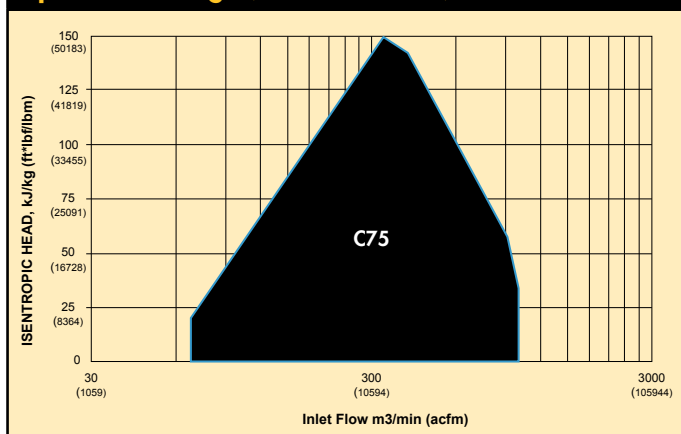
### Key Features

|                         |   |
|-------------------------|---|
| Number of Stages        | 1 - 3   |
| Seals                   | Tandem dry gas  |
| Bearings                | Journal: Axially-aligned<br>Thrust: Self-equalizing, tilting-pad                    |
| Inlet/Discharge Flanges | 36/36 in. Class 900   |
| Efficiency              | Up to 90% isentropic  |
| Maximum Speed           | 8000 - 8855 rpm   |
| Maximum Flow            | 850 m <sup>3</sup> /min (30,000 acfm)   |
| Maximum Total Head      | 120 kJ/kg (40,000 ft-lbf/lb <sub>m</sub> )  |
| Maximum Casing Press.   | 15 510 kPag (2250 psig)   |
| 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 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

