



SGT-300

Industrial gas turbine

The SGT-300 industrial gas turbine has a rugged industrial design that enables high efficiency, reliability, and excellent emissions performance in a broad spectrum of applications for both power generation and mechanical drive.

The gas turbine is a proven unit for all electrical power generation and cogeneration applications.

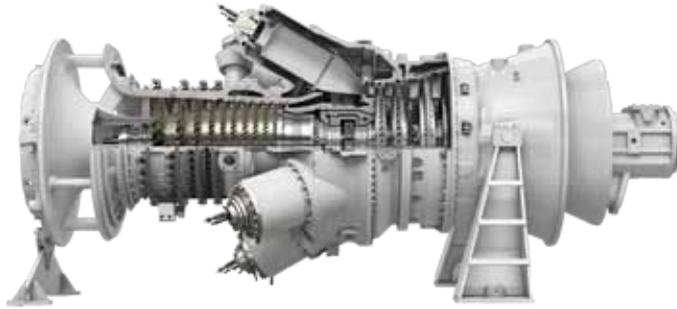
It operates on a wide range of gaseous and liquid fuels. The compact arrangement, on-site or off-site maintainability, and inherent reliability of the SGT-300 make it an ideal gas turbine for the demanding oil and gas industry.

References

Over 150 units have been sold, with more than 5.6 million equivalent operating hours.



The SGT-300 twin-shaft version is used for mechanical drive



Twin-shaft design – evolutionary design focused on reliability



SGT-300 gas turbine package design

Power generation: 7.9 MW(e)
Mechanical drive: 8.4 / 9.2 MW

- Low maintenance requirements
- Low emissions
- Single-shaft version for power generation, twin-shaft version for mechanical drive applications

	Simple cycle power generation	Mechanical drive applications	
		8 MW version	9 MW version
Power output	7.9 MW(e)	8.4 MW	9.1 MW
Fuel	Natural gas, liquid fuel, dual fuel; other fuels on request; automatic changeover from primary to secondary fuel at any load		
Frequency	50/60 Hz		
Gross efficiency	30.6%	34.8%	35.4%
Heat rate	11,773 kJ/kWh	10,349 kJ/kWh	10,174 kJ/kWh
Turbine speed	14,010 rpm	5,750 – 11,500 – 12,075 rpm*	5,750 – 11,500 – 12,075 rpm*
Pressure ratio	13.7 : 1	13.8 : 1	14.5 : 1
Exhaust mass flow	30.2 kg/s	29.7 kg/s	30.5 kg/s
Exhaust temperature	542 °C (1,008 °F)	496 °C (925 °F)	512 °C (954 °F)
NO _x emissions	≤ 15 ppmvd at 15% O ₂ on fuel gas (with DLE)		

Note: Dimensions exclude inlet filter housing and exhaust stack. For power generation, AC generator is included. For mechanical drive, driven equipment is excluded.

*Value shown indicates 100%-design speed of drive shaft

	Physical dimensions	
	Power generation package	Mechanical drive package
Approx. weight	58,349 kg (130,844 lb)	30,409 kg (67,042 lb)
Length	11.7 m (38.5 ft)	6.9 m (22.6 ft)
Width	2.9 m (9.4 ft)	2.9 m (9.4 ft)
Height	3.5 m (11.5 ft)	3.5 m (11.5 ft)