

Industrial gas turbine

The rugged and compact SGT-200 gas turbine is available as a single-shaft version for power generation, and as a twin-shaft turbine for mechanical drive.

The gas turbine operates with various gaseous and liquid fuels. It provides high efficiency and an excellent power-toweight ratio and is available as a factory-assembled package. The SGT-200 gas turbine combines simple design with state-of-the-art technology and is ideally suited for use, for example, as a compressor drive.

More than 430 units have been sold with more than 30 million equivalent operating hours.

References

■ Mining industry, Jingdezhen, China

Combined heat and power Customer: Jingdezhen Coking Industry Group Co. Ltd. Scope: 2×SGT-200 1S gas turbines packaged by ZNGT

Reduced CO₂ emissions, lower operating and production costs



Rapid core engine exchange for minimized downtime



SGT-200 industrial gas turbine



Shop-tested and certified fluid system modules, fully wired and with onskid controls

Power generation: 6.8 MW(e) Mechanical drive: 7.7 MW

- Robust, reliable design
- Flexible fuel capability
- Single-shaft and twin-shaft options available

	Simple cycle power generation	Mechanical drive applications
Power output	6.8 MW(e)	7.7 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	31.5%	33%
Heat rate	11,418 kJ/kWh	10,906 kJ/kWh
Turbine speed	11,053 rpm	10,950 rpm
Pressure ratio	12.2:1	12.3:1
Exhaust gas flow	29.3 kg/s	29.5 kg/s
Exhaust temperature	466°C (871°F)	493°C (919°F)
NO _x emissions	\leq 25 ppmvd at 15% O ₂ on fuel gas (with DLE)	\leq 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.

	Physical dimensions	
	Power generation package	Mechanical drive package
Approx. weight	56,245 kg (124,000 lb)	42,637 kg (94,000 lb)
Length	12.5 m (41 ft)	10.4 m (34 ft)
Width	2.4 m (8 ft)	2.4 m (8 ft)
Height	3.4 m (11 ft)	3.4 m (11 ft)

