



# SGT-600

## Industrial gas turbine

High reliability and availability in combination with good fuel flexibility and third-generation DLE makes the SGT-600 a perfect choice for several onshore applications: Industrial power generation, oil and gas power generation, and mechanical drive applications. Within the IPG applications, the turbine performs well in combined heat and power plants and combined cycle plants.

The industrial gas turbine combines a robust, reliable design with high fuel flexibility and low emissions.

More than 350 units have been sold with over 10 million operating hours. The fleet-leading gas turbine has 190,000 operating hours.

### References

#### ■ Bahia Blanca, Argentina

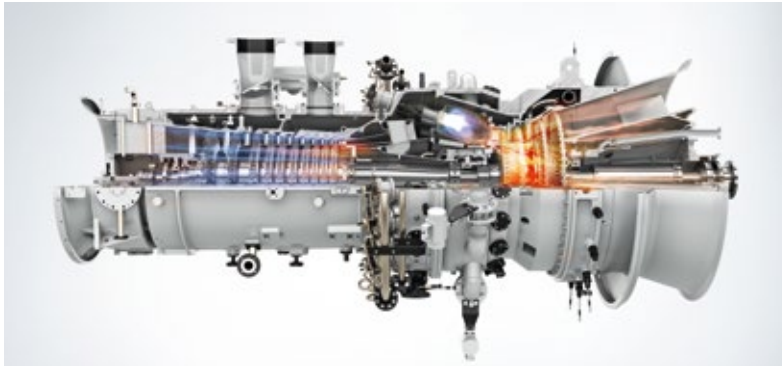
Combined heat and power  
Customer: Profertil S.A.  
Scope: 1 × SGT-600 gas turbine,  
STC-GV (80-6) compressor, generator,  
NEM heat recovery steam generator

#### ■ Tiszaújváros, Hungary

Combined cycle power plant  
Customer: TVK Ltd  
Scope: 1 × SGT-600 gas turbine and  
1 × SST-700 steam turbine



SGT-600 installation for both mechanical drive and power generation



Maintainable, reliable, and robust twin-shaft design for mechanical drive and power generation



For both power generation and mechanical drive package, the driver is the same

**Power generation: 24.5 MW(e)**  
**Mechanical drive: 25.2 MW**

- Robust, reliable design
- High fuel flexibility
- Low emissions

	Simple cycle power generation	Mechanical drive applications
Power output	24.5 MW(e)	25.2 MW
Fuel	Natural gas, liquid fuel, dual fuel	Natural gas, liquid fuel, dual fuel
Frequency	50/60 Hz	
Gross efficiency	33.6%	34.6%
Heat rate	10,720 kJ/kWh	10,390 kJ/kWh
Turbine speed	7,700 rpm	3,850 – 7,700 – 8,085 rpm*
Pressure ratio	14.0 : 1	14.0 : 1
Exhaust mass flow	81.3 kg/s	81.3 kg/s
Exhaust temperature	543 °C (1,009 °F)	543 °C (1,009 °F)
NO <sub>x</sub> emissions	≤ 9 ppmvd at 15% O <sub>2</sub> on fuel gas (with DLE)	≤ 9 ppmvd at 15% O <sub>2</sub> on fuel gas (with DLE)

Note: All combined cycle is based on 2 pressure, no reheat. 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

	Combined cycle power generation	
Siemens combined cycle power plant	SCC-600 1 × 1	SCC-600 2 × 1
Net power output	35.9 MW(e)	73.3 MW(e)
Net plant efficiency	49.9%	50.9%
Net heat rate	7,220 kJ/kWh	7,071 kJ/kWh
Number of gas turbines	1	2

	Physical dimensions	
	Power generation package	Mechanical drive package
Approx. weight	149,688 kg (330,000 lb)	58,968 kg (130,000 lb)
Length	18.8 m (61.68 ft)	11.7 m (38.38 ft)
Width	4.6 m (15.09 ft)	4.0 m (13.12 ft)
Height	4.0 m (13.12 ft)	4.0 m (13.12 ft)



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