The SGT6-5000F engine has demonstrated an exceptional operational record over an 18-year and over 7-million-hour fleet history. Since its introduction in 1993, this F-class gas turbine has undergone continuous development to improve performance, reliability and operational flexibility and to reduce emissions and life cycle costs. This is achieved through extensive fleet operating experience and incorporation of proven features from Siemens’ global family of gas turbines.

The latest offering, the SGT6-5000F with Shaping Power, adds even more flexibility to meet the challenges of today and tomorrow. The engine is designed to offer an additional power boost, which improves the output by 10%. It’s like having a peaker built right into this high efficiency engine.

Shaping Power can be used to load follow renewables, providing extra power on an extremely hot day, or this added flexibility can be used to provide flat power output across the ambient range. Shaping Power gives you choices.

The SGT6-5000F with Shaping Power maintains all the great features of its predecessors, with fast ramping, low emissions, low turndown, long service intervals and can be built into a Siemens Flex-Plant™ for a fully integrated, fast moving plant with low emissions and ultra low water usage.

Siemens is making history again... with the introduction of the SGT6-5000F with Shaping Power™

Answers for energy.
SGT6-5000F with Shaping Power™ performance and technical data

**Compressor**
- **Type**: Axial-flow
- **Number of stages**: 13
- **Rotor speed**: 3600 rpm
- **Pressure ratio**: 17:1

**Combustors**
- **Type**: Ultra low Nox
- **Option**: Dry low Nox
- **Configuration**: Can-annular
- **Fuel (base)**: Gas fuel
- **Fuel (option)**: Dual fuel (gas and liquid)
- **Number of combustors**: 16

**Turbine**
- **Turbine stages**: 4
- **Turbine materials**: All conventionally cast

**Generator type**
- Air-cooled

**Emissions**
- **NOx emissions**: 9 ppm
- **CO emissions**: 4 ppm

**Performance**
- **Grid frequency**: 60 Hz
- **Gross power output**: 206 MW
- **Gross efficiency**: 38%
- **Optional Shaping Power**: +20 MW
- **Start time**: 150 MW in 10 minutes
- **Gross heat rate**: 9,474 kJ/kWh 8,979 Btu/kWh
- **Exhaust temperature**: 585 °C 1,086 °F

*Shaping Power – Flexibility to meet the needs of a dynamic grid*

**Key features**
- High power for grid support and higher cycle efficiency than duct firing alone
- Unprecedented flexibility
- Base load in 12 minutes
- Shaping Power quickly ramps in or out, within seconds
- Easily removable blading in turbine and compressor, and easily removable combustion components.

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