Pre-designed Steam Turbines
The comprehensive product range up to 10 megawatts

Answers for energy.
A Full Range of World-class Industrial Steam Turbines

Whatever your need for a prime mover, Siemens can provide you with versatile, reliable and proven industrial steam turbines. The world leader in steam turbine technology, with over 100 years of experience and continuous development, and a fleet of more than 20,000 installed turbines, we are a prime partner for your business.

Siemens offers a comprehensive range of pre-designed steam turbines up to 10 MW. These innovative but economical machines have a simple modular design which facilitates optimization of performance for the required application. For optimal configuration, we have different but fully compatible design series to draw upon, enabling us to match your needs as exactly as possible.

For our range of industrial steam turbines with a power output from 2 MW up to 250 MW and for large steam turbines from 250 MW to 1,200 MW, we offer separate portfolio brochures.

Our predesigned steam turbines meet customer requirements for economic installation and operation as well as providing excellent flexibility for complex industrial processes. So, whether you need a generator drive for power generation or a mechanical drive for compressors, blowers and pumps, just talk to us and together we can select the turbine or turboset which is optimally suited to your needs.

Of course we strictly adhere to the guidelines laid down in the quality standards ISO 9001 and ISO 14001. Not only the steam turbines, but also associated field-proven high-tech products are available from the Siemens range. These include generators, instrumentation and controls, as well as auxiliary and ancillary systems.

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**SST-010**
(formerly known as EPM = Expansion Power Module)

*up to 110 kW*

The SST-010 is a compact turbogenerator designed to expand natural gas in pressure regulating stations as a direct driving turbine in pipe installation.

**Technical data**
- Power output up to 110 kW
- Gas pressure up to 70 bar(a) / 1,015 psi
- Gas flow rates up to 15,000 m³/h / 530,000 ft³/h
- Exhaust gas pressure up to 25 bar(a) / 363 psi
- Turbine wheel diameter 400 mm / 15.75 in

**Typical dimensions**
- Length 1.2 m / 4 ft
- Width 0.8 m / 2.6 ft
- Height 0.9 m / 3 ft

**Features**
- Low-maintenance because of the simple design
- Extremely failure safe
- Quick-start compatible
- Casing flanged directly into the gas pipeline
- ATEX approved

**SST-050**
(formerly known as AF or BF series)

*up to 750 kW*

The SST-050 is a single-stage, backpressure steam turbine in which the flow passes axially through the blading. It is mainly used as a power source for pumps or fans and especially as a stand-by unit with quick-start capability.

**Technical data**
- Power output up to 750 kW
- Inlet pressure up to 101 bar(a) / 1465 psi
- Inlet temperature dry saturated steam up to 500°C / 930°F
- Speed acc. to driven machine
- Exhaust pressure: back pressure up to 11 bar(a) / 160 psi

**Typical dimensions**
- Length 1 m / 3.3 ft*
- Width 1 m / 3.3 ft*
- Height 1.3 m / 4.3 ft*

*if overhung design and integral gear is accepted

* **turbine only**

**Features**
- Low-maintenance because of the simple design
- Extremely failure safe
- Quick-start compatible
- Turbine with integral oil supply
- Meet requirements of API 611/612*
- ATEX version available

*if overhung design and integral gear is accepted
SST-060
(formerly known as AFA, CFA or CFR series)
up to 5 MW
The SST-060 stand out by their rugged design and renowned reliability even under the most severe operating conditions. They are ideal for saturated steam service. Their suitability for use as condensation or back-pressure turbines in combination with various integral gears modules opens up a broad application range.

Technical data
• Power output up to 6 MW
• Inlet pressure up to 131 bar(a) / 1900 psi
• Inlet temperature dry saturated steam up to 530°C / 985°F
• Speed acc. to driven machine
• Exhaust pressure: back pressure up to 29 bar(a) / 420 psi or vacuum

Typical dimensions
Length 1.5 m / 4.9 ft*
Width 2.5 m / 8.2 ft*
Height 2.5 m / 8.2 ft*

Features
• Backpressure or condensing type
• Package unit design
• Oil unit integrated in base frame
• Nozzle group control valves available
• Quick-start without pre-heating
• Tailor made
• Meet requirements of API 611/612*
• ATEX version available
• Suitable for ORC (Organic Rankine Cycle)
• Suitable for gas expansion

SST-110
(formerly known as TWIN version)
up to 7 MW
The SST-110 provides highest cost efficiency and high performance. It allows to reduce high heat gradients while providing a controlled extraction capability. The SST-110 is a dual casing turbine on one gearbox which can run on different steam lines.

Technical data
• Power output up to 7 MW
• Inlet pressure up to 131 bar(a) / 1900 psi
• Inlet temperature dry saturated steam up to 530°C / 985°F
• Speed acc. to driven machine
• Exhaust pressure: back pressure or vacuum

Typical dimensions
Length approx. 6 m / 20 ft (incl. generator)
Width 2.8 m / 9.2 ft
Height 3.2 m / 10.5 ft

Features
• Backpressure, extraction or condensing type
• Package unit design
• Oil unit integrated in base frame
• Nozzle group control valves available
• Quick-start without pre-heating
• Extremely compact construction
• Pressure controlled extraction
• High pressure/low pressure applications
• Meet requirements of API 611/612*
• ATEX version available
• Suitable for ORC (Organic Rankine Cycle)
• Suitable for gas expansion

*if overhung design and integral gear is accepted
SST-120
(formerly known as Tandem version)

up to 10 MW
The SST-120 is a multi casing turbine consisting of different turbine modules on each shaft end of the generator. These can be used in parallel or serial steam flow arrangement.

Technical data
• Power output up to 10 MW
• Inlet pressure up to 131 bar(a)/1.900 psi
• Inlet temperature dry saturated steam up to 530° C/985° F
• Speed acc. to driven machine
• Exhaust pressure: back pressure or vacuum

Typical dimensions
Length approx. 9 m/30 ft (incl. generator)
Width 2.8 m/9.2 ft
Height 3.2 m/10.5 ft

Features
• Backpressure, extraction or condensing type
• Package unit design
• Oil unit integrated in base frame
• Nozzle group control valves available
• Quick-start without pre-heating
• Extremely compact construction
• Pressure controlled extraction
• High pressure-/Low pressure applications
• Meet requirements of API 611/612*
• ATEX version available
• Suitable for ORC (Organic Rankine Cycle)
• Suitable for gas expansion

*if overhung design and integral gear is accepted

Fields of application
Siemens industrial steam turbines increase the efficiency of power generation and improve the profitability of industrial applications.

Industries
• Chemistry
• Food & Beverage
• Independent power producers
• Manufacturing industries, producers of pumps and compressors
• Petrochemistry/Refineries
• Smelters/Steel
• Sugar/Palmoil
• Utilities
• Wood-working industry/Paper mills

Applications
• Biomass power plants
• Captive power plants
• Cogeneration/CHP
• Gas expansion
• Geothermal plants
• Heat-recovery
• Mechanical drives
• Ships/Offshore
• Solar thermal plants
• Waste incineration plants

Main advantages
• High efficiency
• High reliability/availability
• Customized proven solutions
• Compact design
• Simple installation and maintenance