



SIEMENS

Compression Solutions

Pre-Designed Turbocompressors

The comprehensive product range from 600 up to 600.000 m³/h

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A full range of World Class Turbocompressors

Siemens offers a full range of pre-designed turbocompressors to meet the needs of the metallurgical, oil and gas and chemical industries. Single stage compressors and blowers with separate gearbox or integrated gearbox can be matched with a range of drivers – steam turbine or electric driver – in a solution to match each unique customer. One of the leading turbo machinery manufacturers with over 100 years of experience and continuous development, and a fleet of more than 4,000 installed turbocompressors and blowers; we are a prime partner for your business.

A wide range of products and wealth of experience

With our unrivalled competence in compressor unit solutions from a single source, Siemens offers a comprehensive range of pre-designed turbo compressor up to 600,000 m³/h, with the flexibility to address the specific requirements for your application (Siemens Turbo-compressors – STC™).

Our standard units with modular design ensure low investment costs and shortest delivery times. Metallurgical, chemical and petrochemical plants as well as refineries are amongst the most common applications for our compression solutions.

We strictly adhere to the guidelines laid down in the quality standards ISO 9001 and ISO 14001. Not only the turbo-compressors and blowers, but also associated field-proven high-tech products are available in the Siemens range. These include steam turbines and electric drivers instrumentation and controls, as well as auxiliary and ancillary systems.

Type	Gas flow (m ³ /h)	50,000	100,000	150,000	200,000	250,000	300,000	350,000	400,000	450,000	500,000	550,000	600,000	
STC-SOF	15.000 – 600.000 m ³ /h	[Bar chart showing range from 15,000 to 600,000 m³/h]												
STC-SOL	15.000 – 400.000 m ³ /h	[Bar chart showing range from 15,000 to 400,000 m³/h]												
STC-SOR	600 – 360.000 m ³ /h	[Bar chart showing range from 600 to 360,000 m³/h]												
STC-GO	5.000 – 300.000 m ³ /h	[Bar chart showing range from 5,000 to 300,000 m³/h]												
STC-STO	5.000 – 150.000 m ³ /h	[Bar chart showing range from 5,000 to 150,000 m³/h]												

Pre-designed turbocompressors

The comprehensive Siemens product range from 600 up to 600,000 m³/h



STC-SOF

formerly known as SFO or SFP series

from 15,000 up to 600,000 m³/h

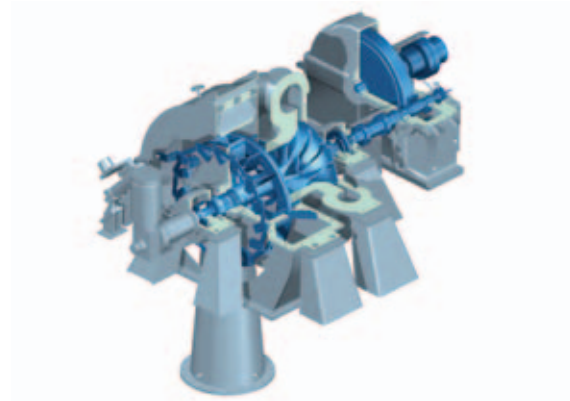
Der STC-SOF (SFO/SFP) is a single stage centrifugal compressor with open form, overhung impeller. The rotor is supported in a separate bearing pedestal. If required, this machine type is designed according to API-standards.

Technical data

- Flow rates from 15,000 up to 600,000 m³/h
- Pressure ratio up to 3.5
- Impeller diameter up to 2,240 mm
- Driver of your choice

Features

- Highest aerodynamic efficiency
- Minimum cooling water requirements
- Modular design principle
- Standardized components
- Wide range of proven aerodynamic impeller designs
- Flow control via inlet guide vane unit, variable diffusor guide vanes, speed control or combinations
- Backward curved impellers or radial tip with three-dimensional blades
- Excellent wear resistance over the complete impeller
- Maintenance friendly design
- OEM packages with Siemens steam turbine (SST™) available



STC-SOL

formerly known as SL series

from 15,000 up to 400,000 m³/h

The STC-SOL (SL) is a single-stage centrifugal compressor with open-form impeller, with radially ending blades. The impeller is mounted between the bearings. Especially designed for coke gas service.

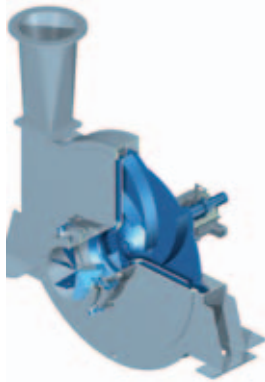
Technical data

- Flow rates from 15,000 up to 400,000 m³/h
- Pressure ratio up to 1.45 (coke gas service)
- Impeller diameter up to 1,800 mm
- Driver of your choice

Features

- Impeller being mounted between bearing
- Minimal radial loading
- Modular design principle
- Standardized components
- Wide range of proven aerodynamic impeller designs
- Flow control via inlet guide vane unit or speed control
- Maintenance friendly design
- OEM packages with Siemens steam turbine (SST™) available
- Dual drive option available (Electric motor + SST™)





STC-SOR

formerly known as R series

from 600 up to 360,000 m³/h

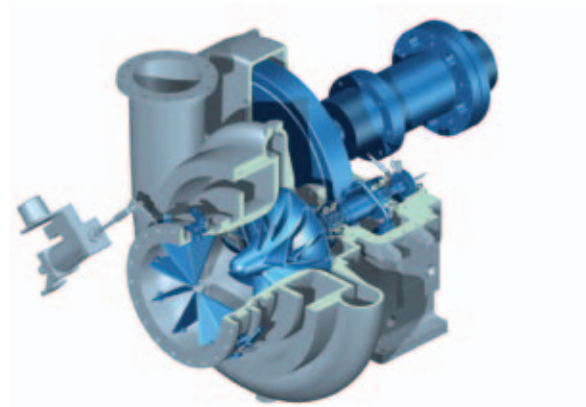
Der STC-SOR (R) is a single-stage centrifugal turboblower with closed impeller in fabricated, modular design allowing optimum adaption to nearly all process requirements.

Technical data

- Flow rates from 600 up to 360,000 m³/h
- Pressure ratio up to 1.7
- Impeller diameter up to 2,240 mm
- Driver of your choice

Features

- Large variety of impellers, casings and materials
- Various shaft seal systems
- Different bearing versions and lubrication systems
- Flexibility in direction of rotation and discharge nozzle
- OEM packages with Siemens steam turbine (SST™) available



STC-GO

formerly known as SFNG, SFOG or SFPG series

from 5,000 up to 300,000 m³/h

The STC-GO is an integrally geared single-stage centrifugal compressor with open-form, overhung impeller. The impeller is mounted directly onto the high-speed shaft of the gearbox. If required, this machine type is designed according to API-standards.

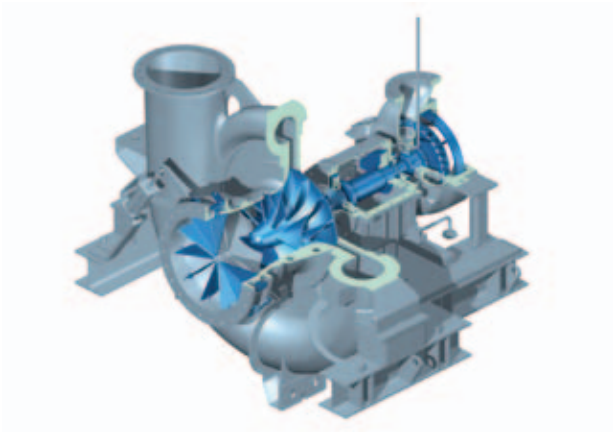
Technical data

- Flow rates from 5,000 up to 300,000 m³/h
- Pressure ratio up to 3.5
- Impeller diameter up to 1,120 mm
- Driver: Electric motor

Features

- Highest aerodynamic efficiency
- Minimum cooling water requirements
- Modular design principle
- Standardized components
- Integrated lube oil supply system
- Wide range of proven aerodynamic impeller designs
- Flow control via inlet guide vane unit, variable diffusor guide vanes, speed control or combination
- Backward curved impellers or radial tip with three-dimensional blades
- Excellent wear resistance over the complete impeller
- Maintenance friendly design





STC-STO

formerly known as ECM = Expansion Compression Module

from 15,000 up to 150,000 m³/h

The STC-STO is an integral turbocompressor/steam turbine-unit with single shaft design. This compact design - impeller and turbine wheel are supported on a single rotor stand - ensures very low steam consumption, high efficiency and minimum space requirements.

Technical data

- Flow rates from 5,000 up to 150,000 m³/h
- Pressure ratio up to 3.5
- Impeller diameter up to 900 mm (compressor)
- Driver: integrated Siemens steam turbine (SST™)

Features

- Very low steam consumption
- Highest aerodynamic efficiency
- Minimum cooling water requirements
- Modular design principle
- Integrated lube oil supply system
- Wide range of proven aerodynamic impeller designs
- Flow control via inlet guide vane unit or speed control
- Backward curved impellers with three-dimensional blades
- Excellent wear resistance over the complete impeller
- Maintenance friendly design



Fields of application

Siemens pre-designed turbo compressors are designed and manufactured for pretentious industrial applications:

Petrochemicals and Refineries

- SRU (Sulfur recovery units)
- Evaporation (e.g. Oil sands – SAGD/Effluent treatment)

Chemicals

- Fertilizer (Sulfuric Acid)
- Evaporation
- MA/PA
- MMA
- Formaldehyde
- Chlorine gas (wet)
- Various chemical processes

Metallurgy

- Coke Oven Gas
- Sulfuric Acid
- Converter Blower
- Ore Roasting & Processing

The design of pre-designed turbo compressors meets the Customer's requirements, such as:

- Highest availability
- Lowest operating costs
- Corrosive gases
- Optimized controls



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