SIEMENS energy

We power the world with innovative gas turbines

Siemens Energy gas turbine portfolio



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For best view, please use **Acrobat Reader X or higher**.

siemens-energy.com/gasturbines

Gas turbines from 2 to 593 MW

The Siemens Energy gas turbine range has been designed and tailored to help meet our customers' challenges in a dynamic market environment.

Our models range from 2 to 593 MW, fulfilling the requirements of a wide spectrum of applications in terms of efficiency, reliability, flexibility, and environmental compatibility. The products offer low lifecycle costs and an excellent return on investment.

Click for overview ›

› Introduction
- Heavy-duty gas turbines
- Industrial gas turbines
- Aeroderivative gas turbines
- Applications



SGT-100 packages for power generation

Gas turbine overview › Hydrogen overview › References ›

Siemens Energy gas turbines overview

For more information, please click on a product name

Heavy-duty gas turbines

Industrial gas turbines

Aeroderivative gas turbines

SGT-50 [2 MW]
SGT-A05 [4 to 6 MW]
SGT-100 [5 / 6 MW]
SGT-300 [8 / 8 to 9 MW]
SGT-400 [10 to 14 / 11 to 15 MW]

SGT-600 [24 / 25 MW]
SGT-A35 [31 to 37 / 32 to 39 MW]
SGT-700 [33 to 35 / 34 to 36 MW]
SGT-750 [39 to 41 / 40 to 42 MW]
SGT-800 [45 to 62 MW]

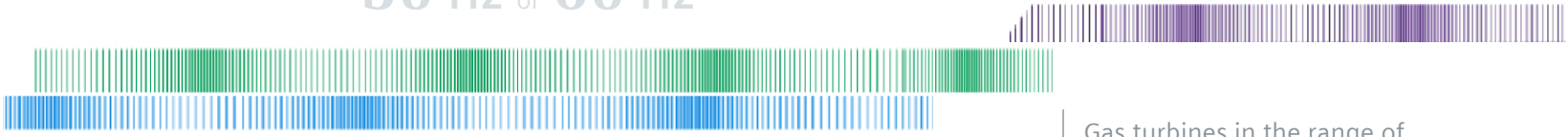
SGT6-2000E [119 MW]
SGT6-5000F [260 MW]
SGT6-8000H [310 MW]
SGT6-9000HL [440 MW]

60 Hz

SGT5-2000E [198 MW]
SGT5-4000F [329 to 385 MW]
SGT5-8000H [450 MW]
SGT5-9000HL [593 MW]

50 Hz

50 Hz or 60 Hz



Gas turbines in the range of
0 – 15 MW

Gas turbines in the range of
15 – 100 MW

Gas turbines in the range of
100 – 600 MW

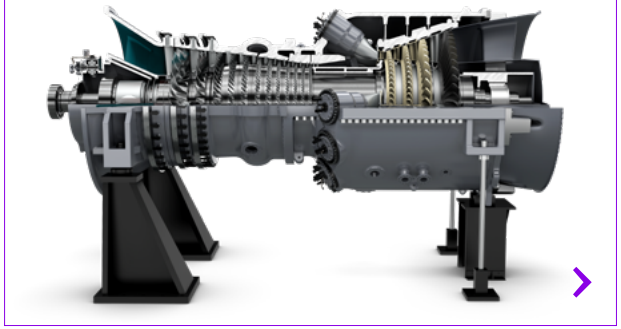
General note:
All simple cycle and mechanical drive performance data in this document are gross values at ISO ambient conditions.
All combined cycle performance data in this document are gross values at ISO ambient conditions.

Siemens Energy **HL-class** gas turbines are paving the way to the next level of efficiency and performance. The evolutionary development step, derived from proven H-class technology, combines a **series of new but already tested technologies** like super-efficient internal cooling features for blades and vanes and an advanced combustion system to increase firing temperature.

Record-holder for the most powerful and efficient **combined cycle efficiency exceeding 64%**.

The HL-class consists of two engines: SGT5-9000HL and SGT6-9000HL.

- Derived from proven Siemens Energy H-class technology
- Pushing efficiency and performance to the next level
- Competitive service model with 33,000 Equivalent Base Hours (EBH) / 1,250 Equivalent Starts (ES)



With a combined cycle efficiency of more than 64%, the HL-class gas turbines are paving the way to the next level.



Technical data sheet | Key features

Duke Energy, Lincoln County, USA

SGT5-9000HL
SGT6-9000HL

Power output: 440 – 593 MW

Heavy-duty gas turbines

Power generation

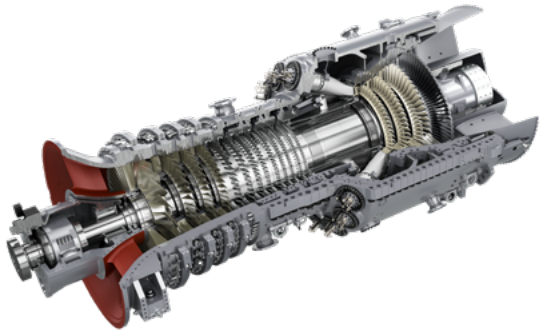
Frequency	50/60 Hz
Gross efficiency	>43.0 – >43.2%
Exhaust temperature	670 – 675 °C (1,238 – 1,247 °F)

The **SGT5-8000H** offers outstanding performance and high operational flexibility. The air-cooled turbine provides a power output of **450 MW**. With short start-up times and high load variations, the turbine offers **low lifecycle costs** and helps to meet fluctuating power demands.

The turbine is the core component of highly efficient gas-fired power plants, designed for 675 MW with an efficiency higher than 62% in combined cycle operation.

With more than **4.0 million fired hours**, the SGT-8000H series provides mature technology with verified reliability and availability.

- Outstanding performance
- High operational flexibility
- Proven in commercial operations



The SGT5-8000H achieves an efficiency higher than 62% in combined cycle operations



New Capital, Cairo, Egypt

Technical data sheet | Key features

SGT5-8000H

Heavy-duty gas turbine

Power output: 450 MW

Power generation

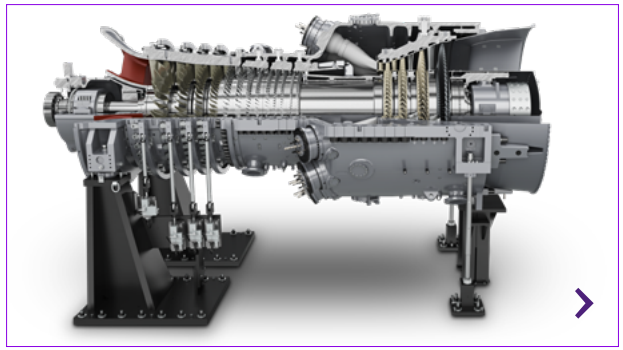
Frequency	50 Hz
Gross efficiency	41.2%
Exhaust temperature	630 °C (1,166 °F)

The **SGT6-8000H** offers outstanding performance and high operational flexibility. The air-cooled turbine provides a power output of **310 MW**. With short start-up times and high load variations, the turbine offers low life-cycle costs and helps to meet fluctuating power demands.

The turbine is the core component of highly efficient gas-fired power plants, designed for 472 MW with an efficiency higher than around 62% in combined cycle operation.

With more than **4.0 million fired hours**, the SGT-8000H series provides mature technology with verified reliability and availability.

- Outstanding performance
- High operational flexibility
- Proven in commercial operations



The SGT6-8000H achieves an efficiency higher than around 62% in combined cycle operations



Technical data sheet

Key features

Dangjin 3, South Korea

SGT6-8000H

Heavy-duty gas turbine

Power output: 310 MW

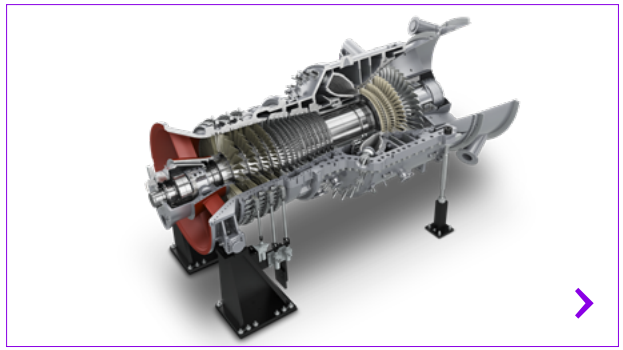
Power generation

Frequency	60 Hz
Gross efficiency	40.4%
Exhaust temperature	645 °C (1,193 °F)

The proven **SGT5-4000F** gas turbine has a **robust design** with internal cooling air passages for **trusted long-term operation** and **fast start-up capability**. The advanced annular combustion chamber with individually replaceable heat shields allows for **easy and fast** walk-in **maintenance**. Hydraulic Clearance Optimization (HCO) reduces clearance losses to increase the gas turbine efficiency and minimize degradation at start-up and shut down.

Today, more than **380 turbines** have been **sold**. The installed fleet has accumulated an impressive fleet experience of over **29 million equivalent operating hours**, and a fleet **reliability** of more than **99%**.

- Proven design, large fleet experience
- Easy maintenance, high availability
- High operational flexibility



The SGT5-4000F is a well-proven 50 Hz gas turbine with an outstanding reliability and availability



Ribatejo, Lisbon, Portugal

Technical data sheet | Key features

SGT5-4000F

Heavy-duty gas turbine

Power output: 329 – 385 MW

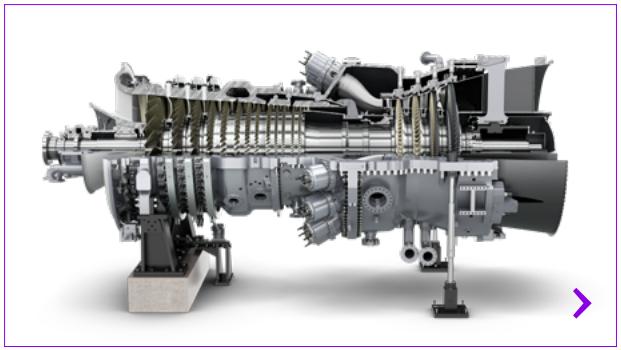
Power generation

Frequency	50 Hz
Gross efficiency	41.0 – 41.5%
Exhaust temperature	599 – 619 °C (1,110 – 1,146 °F)

The **SGT6-5000F** gas turbine offers economical power generation with fast start-up for peak, intermediate, or base load duty. It achieves peak values for reliability and continuous operation with **highest performance values in its class**.

Today, more than **420 turbines** have been **sold**. The installed fleet has accumulated more than **21 million equivalent operating hours**, with a fleet **reliability** of over **99%**.

- Highest power output for 60 Hz F-class
- Fast start-up and load changing capabilities
- Low emissions with an NO_x emission of ≤9 ppmvd on gas and ≤25 ppmvd on oil



The SGT6-5000F offers world-class reliability and best-in-class emission values



SGT6-5000F

Heavy-duty gas turbine

Power output: 260 MW

Power generation

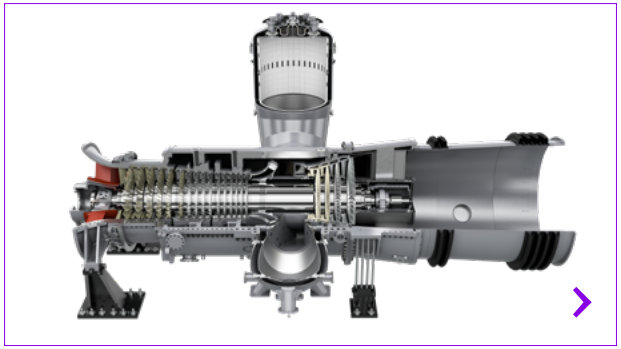
Frequency	60 Hz
Gross efficiency	40.6%
Exhaust temperature	589 °C (1,092 °F)

The **SGT5-2000E** gas turbine is a **proven, robust** engine for the 50 Hz market which is used in simple cycle or combined cycle processes with or without combined heat and power. It is suitable for **all load ranges**, including peak load.

The SGT5-2000E offers outstanding **fuel flexibility**. It can be fired with low calorific gases or gases containing CO_2, H_2S and N_2, as well as with crude oil and other liquid fuels with high viscosity. It provides **low NO_x emissions**, even in the part-load range.

Today, around **330 turbines** have been sold, and additionally, more than **270 units** under license. Our installed fleet has accumulated over **33 million equivalent operating hours**. The SGT-2000E series fleet´s overall best-in-class reliability exceeds **99.5%**.

- Best-in-class reliability
- High operational and fuel flexibility
- Easy maintenance



Best-in-class reliable technology; robust and flexible performance



Technical data sheet | Key features

Az Zour South, Kuwait

SGT5-2000E

Heavy-duty gas turbine

Power output: 198 MW

Power generation

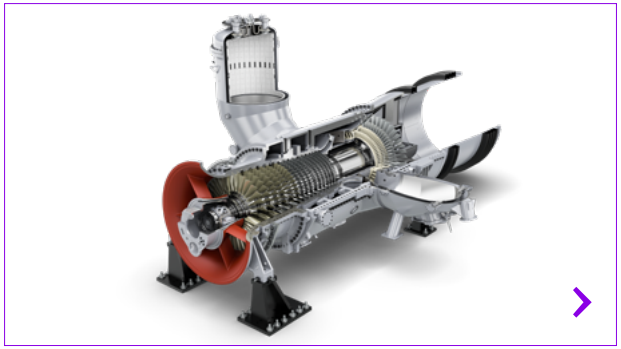
Frequency	50 Hz
Gross efficiency	37.6%
Exhaust temperature	536 °C (997 °F)

The **SGT6-2000E** gas turbine is a **proven, robust** engine for the 60 Hz market which is used in simple cycle or combined cycle processes with or without combined heat and power supply. It is suitable for all load ranges, including peak load.

The SGT6-2000E offers outstanding **fuel flexibility**. It can be fired with low calorific gases or gases containing CO_2, H_2S and N_2, as well as with crude oil and other liquid fuels with high viscosity. It provides **low NO_x emissions**, even in the part-load range.

Today, more than **100 turbines** have been sold, resulting in a fleet experience of over **12 million equivalent operating hours**. The SGT-2000E series fleet's overall best-in-class reliability constantly exceeds **99.5%**.

- Best-in-class reliability
- High operational and fuel flexibility
- Easy maintenance



Best-in-class reliable technology; robust and flexible performance



Technical data sheet | Key features

Charles D. Lamb Energy Center, Oklahoma, USA

SGT6-2000E

Heavy-duty gas turbine

Power generation: 119 MW

Power generation

Frequency	60 Hz
Gross efficiency	35.5%
Exhaust temperature	532 °C (990 °F)

The **market leading SGT-800** industrial gas turbine offers **broad flexibility**.

The SGT-800 combines a simple, robust design, for **high reliability** and **easy maintenance**, with **high efficiency** and **low emissions**.

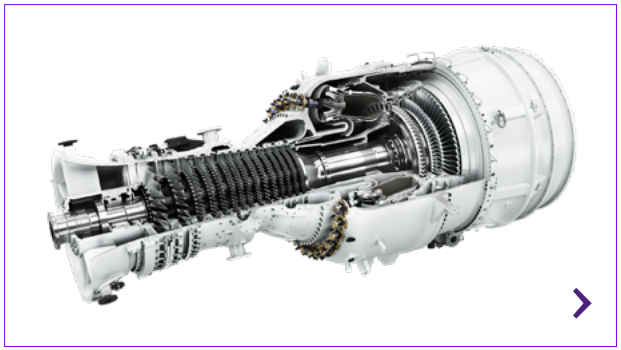
Sustainable and future proof. **Targeting 100% hydrogen** capability by 2026. HVO100 released and improving **other green fuel** capabilities.

Designed for **flexible operation** makes it perfectly suited for **peaking power** and **grid support**.

High efficiency and steam-raising capability make it excellent in **simple cycle**, **cogeneration** and **combined cycle** applications.

More than **620 units sold** and over **20 million operating hours**. An excellent choice for both **power generation** and **industrial applications**.

- High fleet reliability
- Flexible solutions
- Excellent performance



SGT-800 core engine is available with different ratings



Technical data sheet | Key features

Amata Nakorn, Chonburi, Thailand

SGT-800

Industrial gas turbine

Power generation: 45.3 – 62.5 MW(e)

Power generation

Frequency	50/60 Hz
Gross efficiency	38.4 – 41.1%
Exhaust temperature	560 – 596 °C (1,041 – 1,104 °F)
Exhaust mass flow	115.1 – 137.7 kg/s

SCC-800 2x1 combined cycle power plant

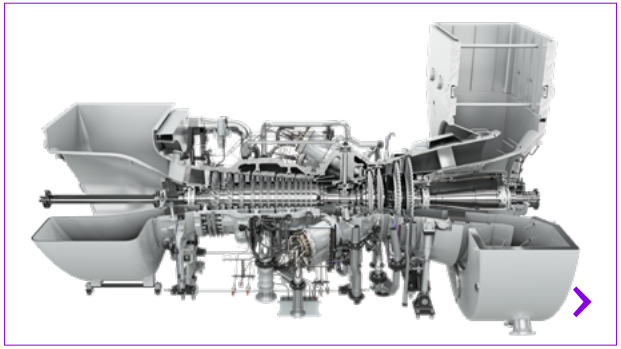
Gross plant output	134.5 – 182.0 MW(e)
Gross plant efficiency	57.8 – 60.6%

With **maximized uptime, top-class performance**, and a **low environmental footprint** offering the customer high lifetime profitability, the **SGT-750** industrial gas turbine is a perfect choice for the oil and gas industry as well as industrial power generation. The modular and flexible engine enables onshore or offshore applications, mechanical drive or heat and power. It combines a robust, reliable design with high efficiency and low emissions.

The SGT-750 offers broad flexibility with **different rating options** due to excellent part load capability. When running on lower load the maintenance intervals will be extended, low emissions can be guaranteed while the efficiency still is kept over 40%.

The SGT-750 has a track record of **successful performance** after years in operation and verified results in various applications. Units are sold for use in both power generation and compressor applications such as pipelines and liquefied natural gas (LNG).

- Maximized uptime
- High efficiency
- Low emissions



SGT-750 core engine with a free high-speed power turbine



Technical data sheet

Kaltex, Altamira, Mexico

SGT-750

Industrial gas turbine

Power generation: 38.9 – 41.0 MW(e)
Mechanical drive: 40.0 – 42.2 MW

Power generation

Frequency	50/60 Hz
Gross efficiency	40.2 – 40.5%
Exhaust temperature	457 – 468 °C (855 – 874 °F)
Exhaust mass flow	116.0 – 118.1 kg/s

Mechanical drive applications

Efficiency	41.5 – 41.7%
Exhaust temperature	457 – 468 °C (855 – 874 °F)
Exhaust mass flow	116.0 – 118.1 kg/s

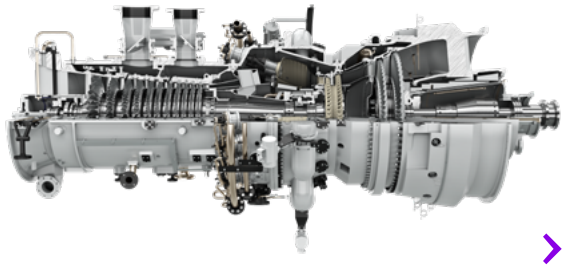
Thanks to its wide fuel range capability and design features, the **SGT-700** is a perfect choice for several applications: industrial power generation, oil and gas power generation, and mechanical drive applications.

It performs well in **combined cycle plants**, and **combined heat and power plants**.

The SGT-700 gas turbine is an evolution of the proven SGT-600 and is specifically designed for **higher power output**. It offers **easy on-site or off-site maintenance**, and operates with a wide range of gaseous and liquid fuels on Dry Low Emission (DLE).

More than **142 units** have been sold with over **5.8 million operating hours**. The fleet-leading gas turbine has over 162,000 operating hours.

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



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



Three SGT-700 packages for mechanical drive

Technical data sheet

SGT-700

Industrial gas turbine

Power generation: 32.6 – 35.2 MW(e)
Mechanical drive: 33.5 – 36.2 MW

Power generation

Frequency	50/60 Hz
Gross efficiency	36.8 – 38.0%
Exhaust temperature	530 – 531 °C (986 – 988 °F)
Exhaust mass flow	96.4 – 98.7 kg/s

Mechanical drive applications

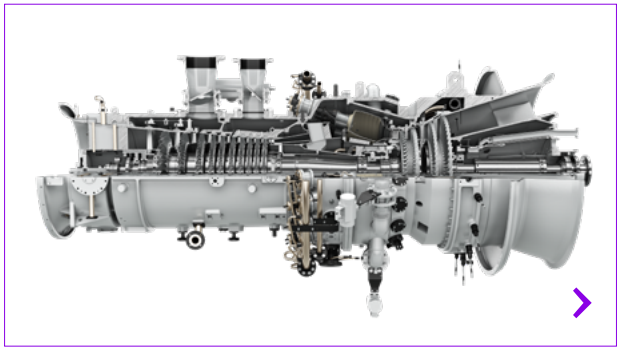
Efficiency	37.8 – 39.0%
Exhaust temperature	530 – 531 °C (986 – 988 °F)
Exhaust mass flow	96.4 – 98.7 kg/s

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 **363 units** have been sold with over **13 million operating hours**. The fleet-leading gas turbine has 180,000 operating hours.

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



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



SGT-600 installation for both mechanical drive and power generation

Technical data sheet

SGT-600

Industrial gas turbine

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

Power generation

Frequency	50/60 Hz
Gross efficiency	33.6%
Exhaust temperature	543 °C (1,009 °F)
Exhaust mass flow	81.3 kg/s

Mechanical drive applications

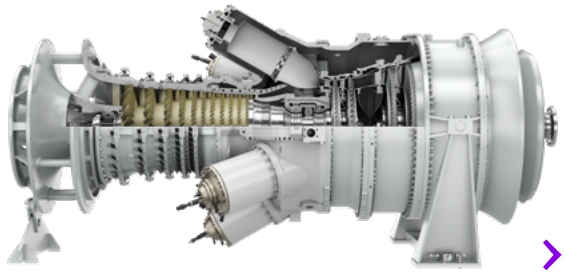
Efficiency	34.6%
Exhaust temperature	543 °C (1,009 °F)
Exhaust mass flow	81.3 kg/s

The **SGT-400** is a twin-shaft gas turbine available in different configurations and power ratings to support power generation and mechanical drive applications from 13–15 MW. The twin-shaft arrangement allows for commonality of parts in mixed-duty installations.

The gas turbine offers the **highest efficiency** in its power class, incorporating the latest aerodynamic and combustion technologies.

With about 20 years of operating experience, the SGT-400 is proven in both offshore and onshore applications. Over **450 units** have been sold with more than **11.7 million hours operating experience**. The fleet leader has accumulated more than 165,000 operating hours.

- Latest aerodynamic and combustion technology
- Suitable for all climates, onshore and offshore
- High power-to-weight ratio



Twin-shaft design for both power generation and mechanical drive applications



Technical data sheet

The SGT-400 is available as a factory-assembled package

SGT-400

Industrial gas turbine

Power generation: 12.9 – 14.3 MW(e)
Mechanical drive: 13.4 – 14.9 MW

Power generation

Frequency	50/60 Hz
Gross efficiency	34.8 – 35.6%
Exhaust temperature	510 – 555 °C (950 – 1,019 °F)
Exhaust mass flow	34.2 – 44.5 kg/s

Mechanical drive applications

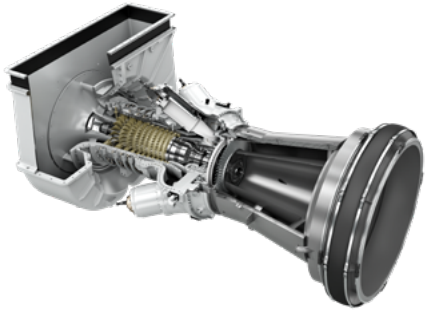
Efficiency	36.4 – 37.1%
Exhaust temperature	509 – 543 °C (949 – 1,009 °F)
Exhaust mass flow	34.3 kg/s – 44.5 kg/s

The **SGT-300** industrial gas turbine has a rugged industrial design that enables **high efficiency, reliability**, and **excellent emissions performance** in a broad spectrum of applications for both power generation and mechanical drive.

The gas turbine is a **proven** unit for all electrical power generation and cogeneration applications. It operates on a wide range of gaseous and liquid fuels. The compact arrangement, on-site or off-site maintainability, and inherent reliability of the SGT-300 make it an ideal gas turbine for the demanding oil and gas industry.

Over **200 units** have been sold, with more than **10 million equivalent operating hours**.

- Low maintenance requirements
- Low emissions
- Single-shaft version for power generation, twin-shaft version for mechancial drive applications



Robust, reliable, maintainable single-shaft version for power generation applications



Technical data sheet

Orient Champion Paper Shanghai, China

SGT-300

Industrial gas turbine

Power generation: 8.0 MW(e)
Mechanical drive: 8.4 – 9.1 MW

Power generation

Frequency	50/60 Hz
Gross efficiency	30.8%
Exhaust temperature	534 °C (993 °F)
Exhaust mass flow	30.2 kg/s

Mechanical drive applications

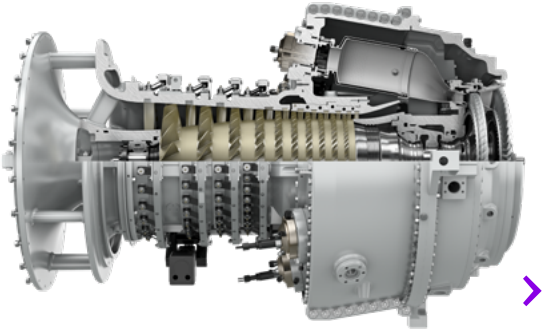
Efficiency	35.3 – 36.0%
Exhaust temperature	490 – 504 °C (914 – 939 °F)
Exhaust mass flow	29.5 – 30.4 kg/s

The **SGT-100** industrial gas turbine is a proven unit for all electrical power generation and mechanical drive applications. The compact arrangement, on-site or off-site maintainability, and inherent reliability makes it an ideal gas turbine for the demanding **oil and gas industry**.

The gas turbine has a rugged industrial design that enables **high efficiency** and **excellent emissions performance** on a wide range of gaseous and liquid fuels.

More than 440 units have been sold with more than 32.5 million operating hours. The lead package has over **225,000 equivalent hours of operation**.

- Robust and reliable product
- Wide range of gaseous and liquid fuels
- Single-shaft version for power generation or twin-shaft version for mechanical drive applications



Robust, reliable, maintainable single-shaft design for power generation applications



The SGT-100 combines advanced technology with robust construction

Technical data sheet

SGT-100

Industrial gas turbine

Power generation: 5.1 – 5.4 MW(e)
Mechanical drive: 5.7 MW

Power generation

Frequency	50/60 Hz
Gross efficiency	30.1 – 30.3%
Exhaust temperature	544 – 549 °C (1,011 –1,020 °F)
Exhaust mass flow	19.5 – 21.0 kg/s

Mechanical drive applications

Efficiency	33.3%
Exhaust temperature	545 °C (1,013 °F)
Exhaust mass flow	19.5 kg/s

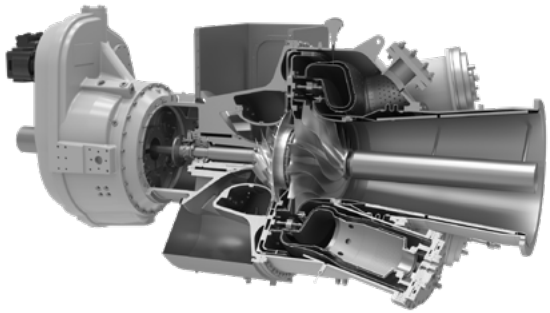
The Siemens Energy **SGT-50** gas turbines is an industrial gas turbine with a power output range of 2MW. The turbine combines minimal maintenance in a compact footprint that make it ideal for continuous power generation onshore and offshore, emergency and standby power and combined heat and power (CHP) plants.

Because of it's simple, **low maintenance design, high reliability and operational experience**, the SGT-50 turbine generator packages are the preferred solution for 2MW power requirements.

The wide fuel range enables operation on extremely low heating value fuels, landfill gas, associated gas from crude oil production, and liquid fuels including some crude oils. They are also available in an externally fired configuration for those customers with off-combustor technologies.

Over 1,000 units have been sold with more than 25 million hours operating experience. The fleet leader has accumulated **more than 250,000 operating hours**.

- Robust and reliable
- Low emissions
- Suitable for all climates – onshore and offshore
- Available in a mobile configuration





SGT-50 units providing base load power generation

Technical data sheet

SGT-50

Industrial gas turbine

Power generation: 1.93 – 2 MW(e)

Power generation

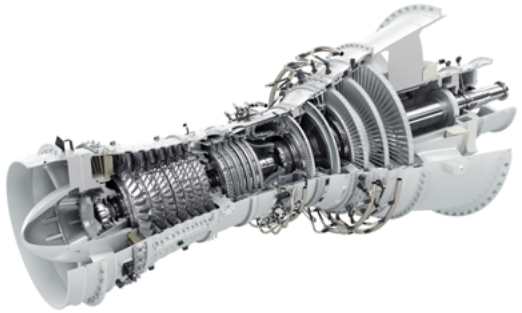
Frequency	50/60 Hz
Gross efficiency	18.8 – 25.3%
Exhaust temperature	549 – 600 °C (1,020 – 1,112 °F)
Exhaust mass flow	9.43 – 15.0 kg/s

With class-leading reliability and availability, the **SGT-A35** is a proven and dependable choice in power generation and mechanical drive applications. It is qualified and proven to meet the stringent standards of the oil and gas industry in both onshore and harsh offshore environment.

The aeroderivative gas generator is highly tolerant of transient excursions and challenging mission cycles, and can be easily exchanged at site, reducing maintenance downtime and cost. Both annular and DLE combustion systems are available, including dual fuel capability.

Evolved through decades of technological advancements, the SGT-A35 has accumulated over **50 million operating hours**, with over **900 units sold**.

- Proven track record in the oil and gas industry
- Optimized for operational flexibility and lowest total cost of ownership
- Excellent fuel flexibility with dual fuel capability
- Lightweight, compact and modular package design to maximize power density



The SGT-A35 is a two-spool gas generator aerodynamically coupled to a free power turbine



Two SGT-A35 offshore generating sets installed on a Floating Production, Storage and Offloading (FPSO) vessel

Technical data sheet

SGT-A35

Aeroderivative gas turbine

Power generation: 31.8 – 38.1 MW(e)
Mechanical drive: 33.1 – 39.5 MW

Power generation

Frequency	50/60 Hz
Gross efficiency	Up to 40.5%
Exhaust temperature	484 – 506 °C (903 – 943 °F)
Exhaust mass flow	97.7 – 105.4 kg/s

Mechanical drive applications

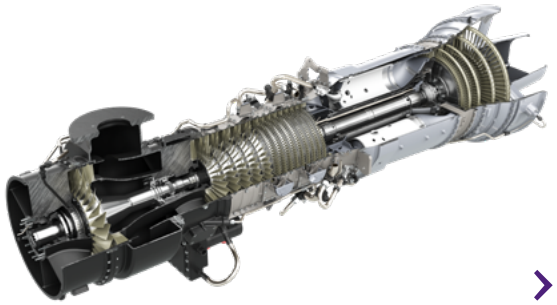
Efficiency	Up to 42.0%
Exhaust temperature	481 – 506 °C (898 – 943 °F)
Exhaust mass flow	97.7 – 105.4 kg/s

Based on proven aeroderivative design, the **SGT-A05** gas turbines are flexible, compact and lightweight designs that are ideally suited for decentralized power generation offering high efficiency and fast start-up capabilities.

The gas turbine engine is designed to operate on a **wide variety of fuels**. The fuel system operations include dual fuel, steam, and water injection. DLE technology is also available.

More than **1,720 SGT-A05 gas turbines** have been sold for industrial use to more than **500 customers in 55 countries**, accumulating an impressive 133 million operating hours since its introduction in 1963.

- More than 1,720 gas turbines supplied
- Full engine power within 60 seconds
- High electrical and cycle efficiency



The SGT-A05 has black start and hot start capability. Full engine power available within 60-90 seconds in all conditions, pending local and package requirements.



Technical data sheet

Mitchchelstown, County Cork, Ireland

SGT-A05

Aeroderivative gas turbine

Power generation: 4.0 – 5.8 MW(e)

Power generation

Frequency	50/60 Hz
Gross efficiency	29.7 – 33.2%
Exhaust temperature	495 – 560 °C (923 – 1,040 °F)
Exhaust mass flow	15.4 – 21.4 kg/s

Siemens Energy Hydrogen Gas Turbines for our sustainable future

Siemens Energy gas turbines are ready for the Hydrogen Economy

In a future decarbonized world, gas turbines and combined cycles running on sustainable hydrogen will complement renewable energy with dispatchable, carbon-free backup power supply to provide electrical energy during periods of "dark doldrums" (lack of sun or wind power).

Already today, most of our turbine models can burn a fuel mixture of natural gas and 30-75% (vol.) of hydrogen, and extensive R&D programs are in place targeting 100% capability between 2023 and 2030.

H_2 readiness configurations are available to optimize front end installation costs while minimizing costs and disruption of a later retrofit to hydrogen combustion.

Using hydrogen as fuel, gas turbines and combined cycles will become the prime provider of flexible and dispatchable residual load in a fully decarbonized power scenario while eliminating the risk of stranded assets.

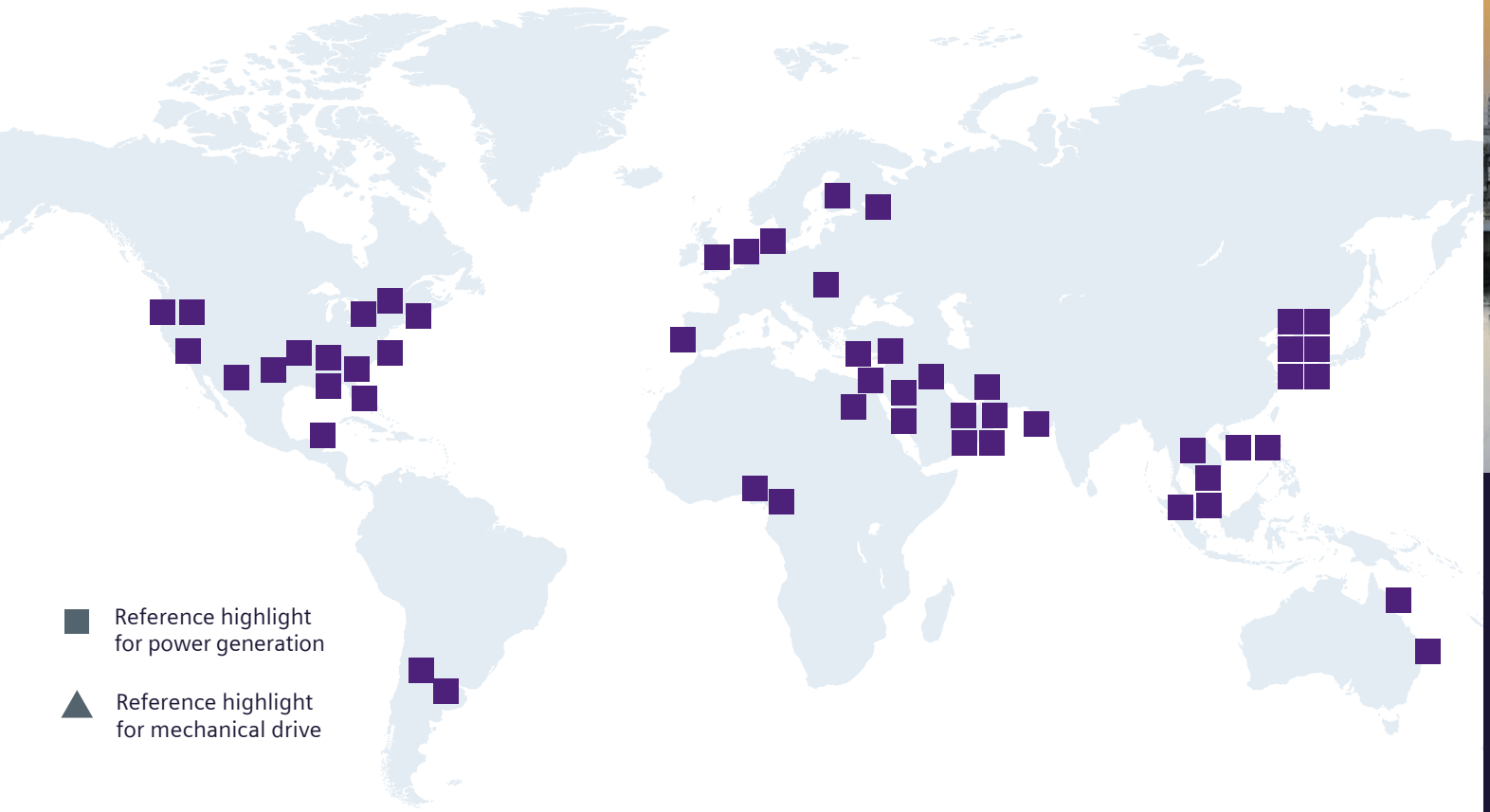


HYFLEXPOWER: The world's first integrated Power-to-H2-to-Power/Heat demonstration plant

Photo: ENGIE Solutions - Arnaud Baguet - Focal Studio

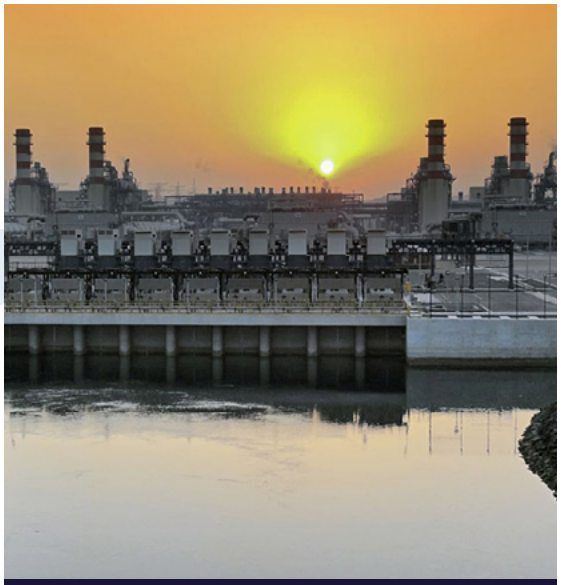
Calculate your carbon dioxide (CO_2) reduction and cost-savings potential by running your aeroderivative, industrial, and heavy-duty gas turbines fully or partially on hydrogen with our Hydrogen Decarbonization Calculator.

References: Heavy-duty gas turbines



Reference highlight for power generation

Reference highlight for mechanical drive



Siemens Energy gas turbines are operating in more than 100 countries.

We provide proven technology with over 7,000 installed heavy-duty, industrial and aeroderivative gas turbines.

Move your mouse over one of the reference highlights to see details, and use the buttons below to show references for each gas turbine.

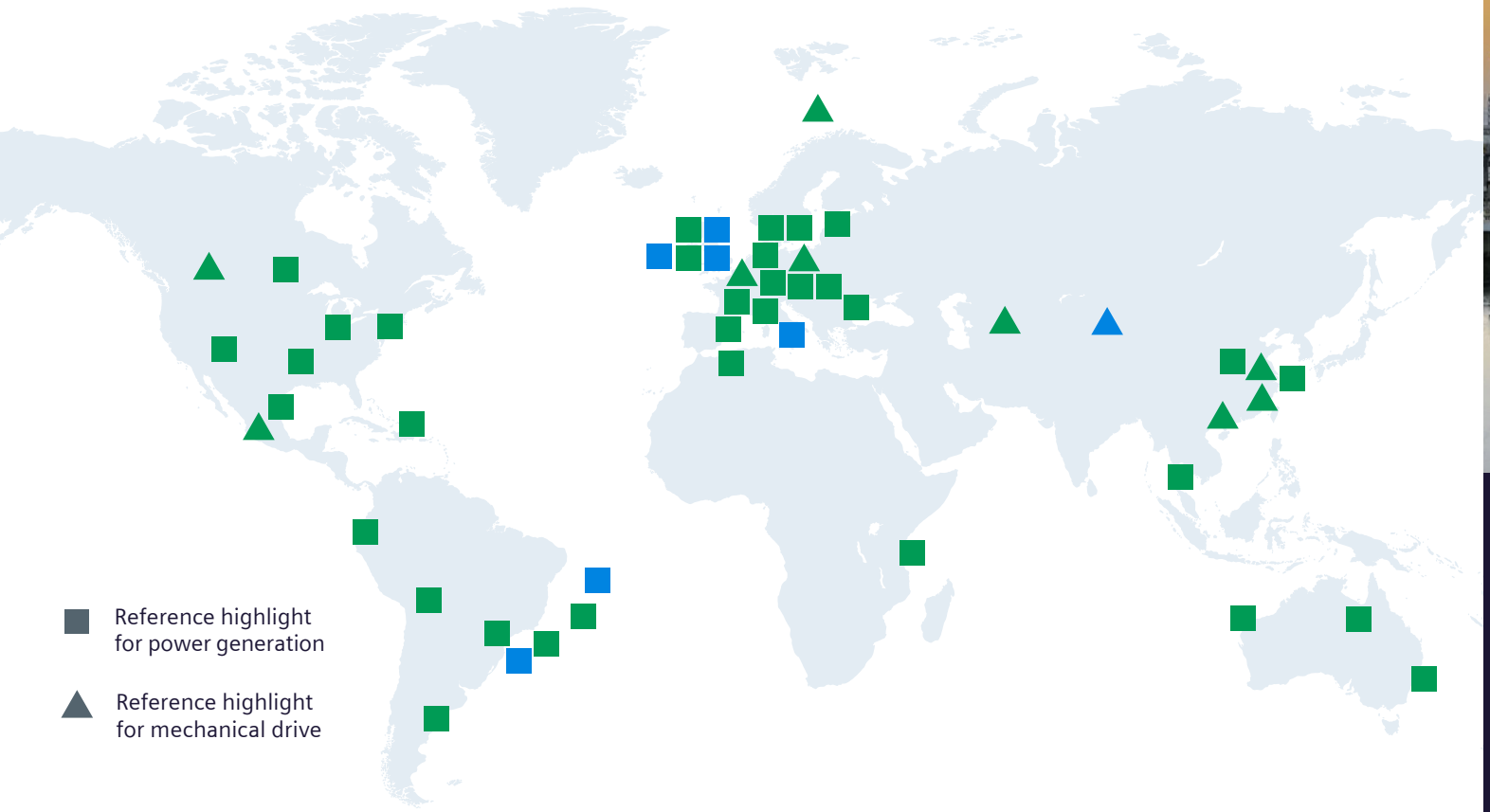
Show all highlights

or choose your turbine:

SGT6-9000HL | SGT6-8000H | SGT6-5000F | SGT5-4000F | SGT6-2000E

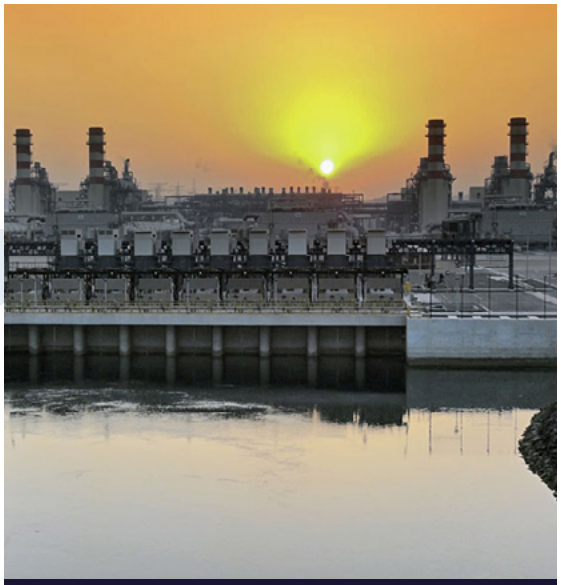
SGT5-9000HL | SGT5-8000H | SGT5-2000E

References: Industrial and Aeroderivative gas turbines



Reference highlight for power generation

Reference highlight for mechanical drive



Siemens Energy gas turbines are operating in more than 100 countries.

We provide proven technology with over 7,000 installed heavy-duty, industrial and aeroderivative gas turbines.

Move your mouse over one of the reference highlights to see details, and use the buttons below to show references for each gas turbine.

Show all highlights

or choose your turbine:

SGT-800 SGT-700 SGT-400 SGT-100 SGT-A35

SGT-750 SGT-600 SGT-300 SGT-A05

Performance data overview: Power generation

POWER GENERATION (METRIC UNITS) | POWER GENERATION (IMPERIAL UNITS) | MECHANICAL DRIVE (METRIC UNITS) | MECHANICAL DRIVE (IMPERIAL UNITS)

	Power output	Frequency	Gross efficiency	Heat rate	Turbine speed	Pressure ratio	Exhaust mass flow	Exhaust temperature
SGT5-9000HL	593 MW	50 Hz	> 43.0%	< 8,375 kJ/kWh	3,000 rpm	24.0 : 1	1,030 kg/s	670 °C
SGT6-9000HL	440 MW	60 Hz	> 43.2%	< 8,333 kJ/kWh	3,600 rpm	24.0 : 1	760 kg/s	675 °C
SGT5-8000H	450 MW	50 Hz	41.2%	8,740 kJ/kWh	3,000 rpm	21.0 : 1	935 kg/s	630 °C
SGT6-8000H	310 MW	60 Hz	40.4%	8,920 kJ/kWh	3,600 rpm	21.0 : 1	650 kg/s	645 °C
SGT5-4000F (329 MW)	329 MW	50 Hz	41.0%	8,780 kJ/kWh	3,000 rpm	20.1 : 1	724 kg/s	599 °C
SGT5-4000F (385 MW)	385 MW	50 Hz	41.5%	8,675 kJ/kWh	3,000 rpm	21.0 : 1	800 kg/s	619 °C
SGT6-5000F	260 MW	60 Hz	40.6%	8,870 kJ/kWh	3,600 rpm	19.5 : 1	587 kg/s	589 °C
SGT5-2000E	198 MW	50 Hz	37.6%	9,582 kJ/kWh	3,000 rpm	12.8 : 1	558 kg/s	536 °C
SGT6-2000E	119 MW	60 Hz	35.5%	10,140 kJ/kWh	3,600 rpm	12.0 : 1	368 kg/s	532 °C
SGT-800 (62 MW)	62.5 MW(e)	50/60 Hz	41.1%	8,759 kJ/kWh	6,600 rpm	21.1 : 1	135.5 kg/s	596 °C
SGT-800 (57 MW)	57.0 MW(e)	50/60 Hz	40.1%	8,970 kJ/kWh	6,600 rpm	22.0 : 1	136.6 kg/s	565 °C
SGT-800 (56 MW)	55.6 MW(e)	50/60 Hz	39.5%	9,123 kJ/kWh	6,600 rpm	22.0 : 1	137.7 kg/s	564 °C
SGT-800 (50 MW)	49.9 MW(e)	50/60 Hz	39.4%	9,147 kJ/kWh	6,600 rpm	19.8 : 1	124.7 kg/s	560 °C
SGT-800 (45 MW)	45.3 MW(e)	50/60 Hz	38.4%	9,381 kJ/kWh	6,600 rpm	18.3 : 1	115.1 kg/s	574 °C
SGT-750 (42 MW)	41.0 MW(e)	50/60 Hz	40.5%	8,898 kJ/kWh	6,100 rpm	25.6 : 1	118.1 kg/s	457 °C
SGT-750 (40 MW)	38.9 MW(e)	50/60 Hz	40.2%	8,946 kJ/kWh	6,100 rpm	24.9 : 1	116.0 kg/s	468 °C
SGT-700 (35 MW)	35.2 MW(e)	50/60 Hz	38.0%	9,466 kJ/kWh	6,500 rpm	20.4 : 1	98.7 kg/s	531 °C
SGT-700 (33 MW)	32.6 MW(e)	50/60 Hz	36.8%	9,778 kJ/kWh	6,500 rpm	19.7 : 1	96.4 kg/s	530 °C
SGT-600	24.5 MW(e)	50/60 Hz	33.6%	10,720 kJ/kWh	7,700 rpm	14.0 : 1	81.3 kg/s	543 °C
SGT-400 (15 MW)	14.3 MW(e)	50/60 Hz	35.6%	10,103 kJ/kWh	9,500 rpm	18.5 : 1	44.5 kg/s	529 °C
SGT-400 (13 MW)	12.9 MW(e)	50/60 Hz	35.0%	10,294 kJ/kWh	9,500 rpm	16.9 : 1	40.0 kg/s	555 °C
SGT-300	8.0 MW(e)	50/60 Hz	31.0%	11,704 kJ/kWh	14,045 rpm	14.4 : 1	30.2 kg/s	534 °C
SGT-100 (5.4 MW)	5.4 MW(e)	50/60 Hz	30.3%	11,613 kJ/kWh	17,384 rpm	15.8 : 1	21.0 kg/s	549 °C
SGT-100 (5.1 MW)	5.1 MW(e)	50/60 Hz	30.1%	11,945 kJ/kWh	17,384 rpm	14.4 : 1	19.5 kg/s	544 °C
SGT-50 DLE	2.0 MW(e)	50/60 Hz	25.5%	14,118 kJ/kWh	25,500 rpm	7.0 : 1	9.43 kg/s	600 °C
SGT-50 Diffusion Flame	1.93 MW(e)	50/60 Hz	18.8%	21,176 kJ/kWh	18,800 rpm	4.6 : 1	15.0 kg/s	549 °C
SGT-A35 (GT61 39 MW)	37.2 MW(e)	50/60 Hz	40.5%	8,910 kJ/kWh	4,850 rpm	25.0 : 1	105.4 kg/s	484 °C
SGT-A35 (GT61 34 MW)	33.5 MW(e)	50/60 Hz	39.3%	9,154 kJ/kWh	4,850 rpm	23.0 : 1	99.0 kg/s	486 °C
SGT-A35 (GT61 34 MW) 60 Hz	33.9 MW(e)	60 Hz	38.0%	9,465 kJ/kWh	3,600 rpm	23.0 : 1	101.0 kg/s	506 °C
SGT-A35 (GT61 34 MW) DLE 60 Hz	31.7 MW(e)	60 Hz	37.8%	9,536 kJ/kWh	3,600 rpm	23.0 : 1	98.1 kg/s	494 °C
SGT-A35 (GT61 34 MW) DLE	33.4 MW(e)	50/60 Hz	39.8%	9,040 kJ/kWh	4,850 rpm	23.0 : 1	97.8 kg/s	487 °C
SGT-A35 (GT62) DLE	31.3 MW(e)	50/60 Hz	38.3%	9,400 kJ/kWh	4,800 rpm	22.0 : 1	97.7 kg/s	485 °C
SGT-A05 (KB7HE)	5.8 MW(e)	50/60 Hz	33.2%	10,889 kJ/kWh	14,600 rpm	14.4 : 1	21.4 kg/s	520 °C
SGT-A05 (KB7S)	5.4 MW(e)	50/60 Hz	32.3%	11,146 kJ/kWh	14,600 rpm	14.2 : 1	21.3 kg/s	495 °C
SGT-A05 (KB5S)	4.0 MW(e)	50/60 Hz	29.7%	12,137 kJ/kWh	14,200 rpm	10.3 : 1	15.4 kg/s	560 °C

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