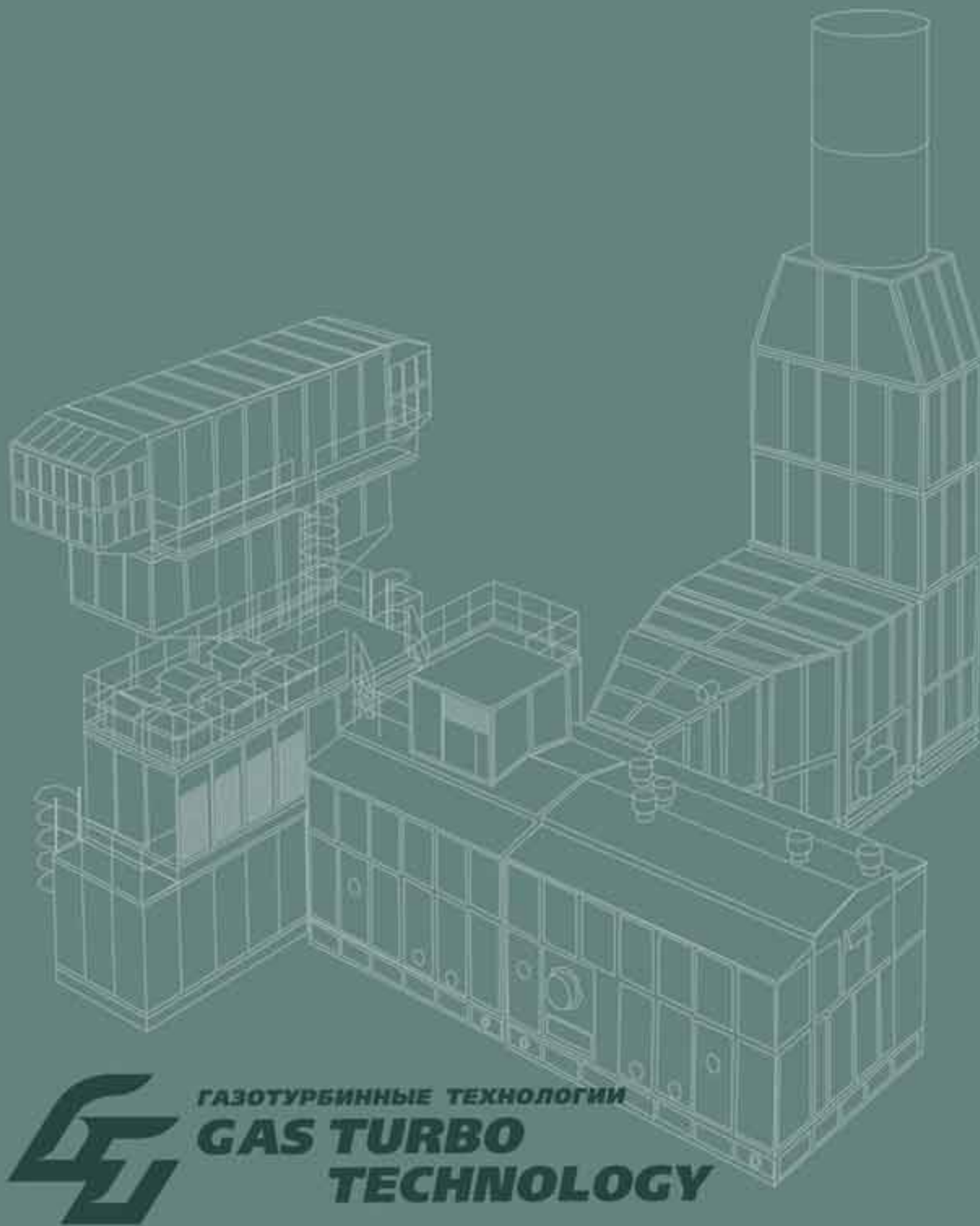


*Now you can independently
calculate whether particular
equipment suits certain
operating conditions*



ГАЗОТУРБИННЫЕ ТЕХНОЛОГИИ
GAS TURBO
TECHNOLOGY

CATALOGUE
GAS TURBO EQUIPMENT

The Catalogue is a unique tool for evaluation of the gas turbine industry and the reliable information source for decision-making

Company contact information (details on companies carrying out design and engineering works, equipment manufacturing, installation and commissioning)



GAS TURBINE TECHNOLOGY		GAS TURBINE TECHNOLOGY	
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Equipment selection

- Gas turbine package datasheet: comprehensive description of basic gas turbine models implemented in power projects. Diagrams, designs, tables, dimensions, data necessary for technical and economic assessment (the range from 100 kW to 160 MW)
- Gas turbine compression packages commissioned in the CIS in 1999 – 2007
- Gas turbine generation packages commissioned in the CIS in 1999 – 2007

Section 1.1

General

The gas turbine is a gas turbine engine (GT) that converts the chemical energy of a fuel into mechanical energy. It consists of a compressor, a combustion chamber, and a turbine. The compressor compresses the incoming air, the combustion chamber burns the fuel, and the turbine extracts the energy from the hot gases to drive the compressor and the generator.

Technical specifications

Parameter	Value
Power output (MW)	100 - 160
Efficiency (%)	30 - 40
Operating pressure (bar)	10 - 20
Operating temperature (°C)	1000 - 1200

Section 1.2

Gas turbine generation packages commissioned in the CIS in 1999 – the first half of 2007

Project Name	Year	Capacity (MW)	Manufacturer
...

Section 1.2

Gas turbine generation packages commissioned in the CIS in 1999 – the first half of 2007

Project Name	Year	Capacity (MW)	Manufacturer
...

Section 1.3

Gas turbine compression packages commissioned in the CIS in 1999 – the first half of 2007

Project Name	Year	Capacity (MW)	Manufacturer
...

- Operating time of gas turbine generation and compression packages

Gas turbine systems (over 200 units) a large scope of equipment of various cycles and capacity

- Microturbines
- Gas turbine powerplants (simple cycle) rated at 70kW - 110 MW
- Gas turbine powerplants (cogeneration) rated at 70kW - 119 MW
- Combined cycle powerplants rated at 1700kW - 972 MW
- Turbine expander power units
- Gas turbine compression packages rated at 4 – 25 MW
- Fuel gas booster compressors

Model	Capacity (MW)	Efficiency (%)	Operating hours (h/yr)	Manufacturer	Notes
GT-1000	100	35	4000	GE	Simple cycle
GT-110	110	35	4000	GE	Simple cycle
GT-150	150	35	4000	GE	Simple cycle
GT-200	200	35	4000	GE	Simple cycle
GT-300	300	35	4000	GE	Simple cycle
GT-400	400	35	4000	GE	Simple cycle
GT-500	500	35	4000	GE	Simple cycle
GT-600	600	35	4000	GE	Simple cycle
GT-700	700	35	4000	GE	Simple cycle
GT-800	800	35	4000	GE	Simple cycle
GT-900	900	35	4000	GE	Simple cycle
GT-1000	1000	35	4000	GE	Simple cycle

Model	Capacity (MW)	Efficiency (%)	Operating hours (h/yr)	Manufacturer	Notes
ST-100	100	30	4000	GE	Simple cycle
ST-150	150	30	4000	GE	Simple cycle
ST-200	200	30	4000	GE	Simple cycle
ST-300	300	30	4000	GE	Simple cycle
ST-400	400	30	4000	GE	Simple cycle
ST-500	500	30	4000	GE	Simple cycle
ST-600	600	30	4000	GE	Simple cycle
ST-700	700	30	4000	GE	Simple cycle
ST-800	800	30	4000	GE	Simple cycle
ST-900	900	30	4000	GE	Simple cycle
ST-1000	1000	30	4000	GE	Simple cycle

Drives (over 600 drives) of the Russian and international companies

- Gas turbines for power generation rated at 30kW – 265 MW
- Gas turbines for mechanical drive rated at 80kW – 52 MW
- Gas turbines for marine propulsion rated at 500kW – 50 MW
- Steam turbines at 1400kW – 1400 MW
- Turbine expanders rated 300kW – 16.5 MW

Gas turbine system equipment (over 500 items) including the main components of gas turbine powerplant and gas compression packages from Russian and international companies

- Turbine generators
- Gas turbine-driven centrifugal compressors
- Control systems
- Heat recovery systems
- Reduction and step-up gears for gas turbines

Model	Capacity (MW)	Efficiency (%)	Operating hours (h/yr)	Manufacturer	Notes
TG-100	100	30	4000	GE	Simple cycle
TG-150	150	30	4000	GE	Simple cycle
TG-200	200	30	4000	GE	Simple cycle
TG-300	300	30	4000	GE	Simple cycle
TG-400	400	30	4000	GE	Simple cycle
TG-500	500	30	4000	GE	Simple cycle
TG-600	600	30	4000	GE	Simple cycle
TG-700	700	30	4000	GE	Simple cycle
TG-800	800	30	4000	GE	Simple cycle
TG-900	900	30	4000	GE	Simple cycle
TG-1000	1000	30	4000	GE	Simple cycle

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Exhibition and conference calendar for your diary Russia and CIS

<i>Dates</i>	<i>Venue</i>	<i>Description</i>	<i>Event Organizer</i>
February 5-8	Russia Samara	Energy – 2008 The 14 th International Specialised Exhibition	Exhibition company Ltd Expo-Volga www.energysamara.ru
February 13-15	Russia Orenburg	Oil and Gas -2008 Specialised Interregional Exhibition	Ural Expo E-mail: uralexpo@mail.esoo.ru www.uralexpo.ru
April 15-17	Russia Moscow	Russia Power 2008 International Exhibition and Conference	PennWell Corporation Phone: (495) 580-32-01 Fax: (495) 580- 32-01 E-mail: svetlanas@pennwell.com www.russia-power.ru
April 15-19	Russia Moscow	Dvigateli 2008/Engines 2008 The 10 th International Show. Scientific and Technical Congress on Engine Production	ASSAD Phone: (495)366-09-16 Fax: (495) 366-45-88 E-mail: dvigateli2008@rambler.ru assad@assad.ru , www.dvigatel.ru
May 13-15	Uzbekistan Tashkent	OGU 2008 The 12 th Uzbekistan International Oil & Gas Exhibition & Conference	ITE Uzbekistan company www.oilgas.uz/en/2008
May 21-23	Kazakhstan Almaty	POWER-KAZINDUSTRY 2008 The 9 th Industrial Forum	IEC "Atakent-Expo" Ph.:+7 (727) 2747926, 2582535 Fax: +7 (727) 2747926, 2582536 E-mail: power@exhibitions.kz , powerkazindustry@mail.ru
May 27-30	Russia Saint Petersburg	ROS-GAS-EXPO-2008 The XII International Specialised Exhibition of Natural Gas Industry and Technology for Gas Equipment	FAREXPO Jsc Phone: (812) 777-04-07 E-mail: gas@orticon.com www.farexpo.ru/gas/index.php
June 3-6	Azerbaijan Baku	Caspian Oil & Gas 2008 The 15 th Anniversary International Caspian Oil and Gas Exhibition and Conference Incorporating Refining and Petrochemicals	Iteca Caspian www.iteca.az ITE Group Plc www.ite-exhibitions.com
June 23-27	Russia Moscow	Oil-and-gas – 2008 The 12 th International Exhibition of Equipment for the Oil and Gas Industries	Expocentre www.mioge.ru
September 14-19	Ukraine Rybachye	XIII INTERNATIONAL CONGRESS OF PROPULSION ENGINEERING	National Aerospace University «KhAI» E-mail: aedlab@ic.kharkov.ua www.khai.edu
September 24-26	Ukraine Kiev	Fuel and Energy Complex of Ukraine: the Present and the Future The 6 th International Forum Power Engineering For Ukrainian Industry 2008 International Trade Fair	International Exhibition Centre Phone: +380 44 201-11-57 Fax: +380 44 201-11-67 E-mail: tek@iec-expo.com.ua energy@iec-expo.com.ua
October 7-10	Kazakhstan Almaty	KIOGE 2008 The 16 th Kazakhstan International Oil & Gas Exhibition & Conference	Iteca www.iteca.kz
November 4-6	Ukraine Kiev	OIL & GAS 2008 The 12 th International exhibition of oil and gas industry POWER & ENERGY 2008 The 7 th International exhibition	ACCO INTERNATIONAL Phone: +38 (044) 458 4621 Fax: +38 (044) 458 4622 E-mail: acco@acco.kiev.ua www.acco.ua

The full list of events can be found at www.gtt.ru/en