ENERGY SOLUTIONS FOR THE OIL AND GAS INDUSTRY
POWERING THE FUTURE

Solar Turbines
A Caterpillar Company
For over 60 years, Solar Turbines has made products essential to powering the oil and gas industry. Solar focuses exclusively on turbomachinery solutions, and this dedicated mindset frees us at every level of the organization to work toward one goal — producing turbines and motor-driven compression solutions that provide maximum availability, reliability and value throughout your equipment’s life cycle.

Solar holds the industry’s largest installed base with equipment featured in more than 15,000 offshore and onshore applications in more than 100 countries. Customers benefit from repeatable quality with reduced risk, minimized emissions, competitive efficiency ratings and low life-cycle cost.
Customers know they can rely on turbomachinery made to proven design standards with consistent, high-quality manufacturing and testing that meets the oil and gas industry’s exacting demands. Solar Turbines has attained 100 percent on-time delivery performance for new machines, and our customers’ expectations are supported throughout the life cycle of equipment with unrivaled technical assistance. Solar’s staff of experienced field personnel around the world, backed by knowledgeable design and support engineers, provide unrivaled local service, wherever our customers may be.

SOLAR TURBINES EQUIPMENT IS INSTALLED IN MORE THAN 15,000 OFFSHORE AND ONSHORE APPLICATIONS IN MORE THAN 100 COUNTRIES.
TURBINES

MECHANICAL DRIVE SETS
Solar manufactures gas turbines that deliver rugged performance in compact and lightweight designs. So you benefit from equipment that provides the highest thermal efficiencies in each power class — and that also can operate on a variety of gas, liquid and renewable fuels.

Gas turbine compressor sets featuring Solar’s family of centrifugal gas compressors are designed for natural gas gathering, transmission, lift, export, re-injection and storage/withdrawal. And, our mechanical drive packages are ideally suited for driving other manufacturers’ rotating equipment. These versatile packages also power pumps for waterflood applications and transportation of crude oil and liquids.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>HORSEPOWER (hp)</th>
<th>KILOWATTS (kW)</th>
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<td>Saturn® 20</td>
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<tr>
<td>Titan™ 250</td>
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GENERATOR SETS

Solar’s gas turbine generator sets are specifically designed for use in power generation for offshore platforms, FPSOs, gas production and process facilities. Combined heat and power (CHP) with Solar gas turbines turns clean-burning natural gas into cost-effective, reliable electricity and captures heat that would otherwise be wasted. This heat then provides steam that can be used for heating, cooling and industrial processes such as direct drying.

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<th>MODEL</th>
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<tr>
<td>Titan™ 250</td>
<td>21,745</td>
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COMPRESSORS

Solar provides reliable and versatile natural gas centrifugal compressors that deliver best-in-class performance. Each compressor is precisely matched with a Solar gas turbine or an electric motor drive, depending on your needs, for a one-stop solution. With an installed base of more than 6,000 compressors, you can be assured that we know how to design, manufacture and service reliable, durable compressors that will keep your operation running.

Solar compressors also feature the latest aerodynamic technology to bring efficiencies across a broad operating range to your application. It’s equipment that serves production and pipeline applications with flexible and stable performance that maximizes value for our customers.

CENTRIFUGAL COMPRESSORS

<table>
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SPARTAN ELECTRIC MOTOR DRIVE COMPRESSOR SET
Solar Turbines offers the Spartan™ EMD, a standardized electric-motor-driven compression solution, for those looking to pair a Solar compressor with other products. The Spartan EMD serves the onshore market and provides the same customer experience offered with our other products — exceptional support throughout the equipment’s entire life cycle.
MODULAR SOLUTIONS

OFFSHORE MODULAR
Single-lift modules integrate the entire compression, pumping or power-generation system. Ranging in size from 250 to 900 tons for single trains and up to 2,500 tons for multiple trains, these specialized modules minimize deck space and integration scope. For weight-sensitive applications, pre-integration is achieved by selective skidding of equipment-intensive process systems.

ONSHORE MODULAR
Onshore solutions enable greater cost and schedule predictability. Building, utility and process systems are provided as configurable blocks and packages, helping your team bring together a highly functional station with minimal time spent at site. Our modular solutions reduce project risk, help control capital cost and create a highly standardized execution platform to offer predictability for your project, operations and maintenance personnel.
Turbomachinery from Solar Turbines performs with reliable and rugged efficiency in a variety of applications and markets around the world. Those applications and markets include:

**SERVING EVERY APPLICATION IN THE OIL AND GAS INDUSTRY**

- **GAS TRANSMISSION/COMPRESSION**
  Performing the essential functions of natural gas compression.

- **STORAGE/WITHDRAWAL**
  Making possible the storage and delivery of natural gas.

- **POWER GENERATION**
  Providing power both onshore and offshore.

- **OFFSHORE PLATFORMS/FPSO**
  Extraction, processing and storage of oil and natural gas until it can be brought to shore for refining and extracting.

- **LNG**
  Turbomachinery using liquefied natural gas produces fewer emissions.

- **MOBILE POWER**
  Complete, proven units that are easy to relocate and connect.
EXCLUSIVE TECHNOLOGIES MINIMIZE EMISSIONS
All Solar equipment is designed to minimize emissions and meet the toughest environmental standards. The exclusive SoLoNOX™ dry lean-premix combustion system significantly limits pollutant formation without costly post-combustion treatment — and without sacrificing power or heat rate. It cuts turbine NO\textsubscript{x} emissions by up to 90 percent and CO by up to 30 percent.

SoLoNO\textsubscript{X} TECHNOLOGY

3,000+
GAS TURBINES EQUIPPED

220 million+
OPERATING HOURS

Over 4 million
TONS OF NO\textsubscript{x} EMISSIONS AVOIDED

PROTECTING EVERY ASPECT OF POWER PRODUCTION
Solar’s Quality, Health, Safety and Environmental (QHSE) management system helps our customers protect the people who operate the equipment, those who live nearby, our customers’ assets and the environment. Safety is a priority for Solar, and the QHSE system helps us comply with your safety system requirements every day on the job.
MAXIMIZE UPTIME, LOWER LIFE-CYCLE COST
Today’s challenging markets demand the most from your turbomachinery. Solar’s full line of equipment for the oil and gas industry promises more productive hours, less repair and shorter service intervals with Equipment Health Management powered by state-of-the-art InSight Platform™ technology.

INSIGHT PLATFORM
InSight Platform is the technology platform designed to deliver advanced remote capabilities and decision support tools, complementary to your existing internal systems, capabilities and infrastructure.

- Fleet manager
- Measurable performance
- Real-time data predictive analytics
- Condition-based maintenance and overhaul
- Commercial incentives

INTELLIGENCE ANYWHERE
Once you own Solar turbomachinery with InSight Platform, you can monitor your equipment anytime, anywhere on your computer, smartphone or tablet.

GLOBAL TECHNICAL SUPPORT NETWORK
Empower your team with access to diagnostics, analytics, fleet statistics, data visualization and our global technical experts to deliver measurable performance.
EXPERIENCE OUR CULTURE OF CUSTOMER CARE

The worldwide Solar Turbines organization is committed to your success, providing the highest-quality experience from your initial inquiry throughout your equipment’s life.

TOTAL LIFE-CYCLE SUPPORT — GUARANTEED
Only Solar serves the oil and gas industry by designing, manufacturing and servicing all the turbines and compressors we offer. This commitment to each product lasts for decades. In fact, there is Solar equipment purchased 50 years ago that remains in use and continues to receive service by our field personnel.

READY TO SERVE YOU EVERYWHERE
Support is just a call or click away. Our customer support personnel make up the world’s largest, best-trained and most experienced turbomachinery service team. We offer support from 65 strategic locations:

- Overhaul centers
- Parts depots
- Field service offices
- Training facilities

Service personnel speak the language and understand the culture, customs and business practices where they work. Our engineers and technicians respond swiftly to provide definitive solutions for any issues, and they are supported with access to knowledgeable design and support engineers at Solar facilities worldwide. Strategically located parts warehouses and sophisticated logistics enable timely delivery of Solar Certified Service Parts and tools to minimize downtime.

MORE THAN MAINTENANCE
Customer support extends beyond maintenance and repairs to include broad offerings that help enhance performance and safety, extend equipment life and prevent obsolescence:

- Overhauls
- Upgrades and uprates
- Refurbishment
- Low-emission conversions
- Technical training courses
POWERING THE FUTURE

The worldwide sales and service organization at Solar Turbines is dedicated to your success. Our culture of customer care is the foundation for our commitment to the highest-quality customer experience — from your initial inquiry throughout the life of your equipment. Turbines, compressors and all solutions we offer for the oil and gas industry will deliver reliable, efficient performance that precisely fits your project requirements.

POWERING THE FUTURE THROUGH SUSTAINABLE, INNOVATIVE ENERGY SOLUTIONS

Solar Turbines - Sales and Service Locations

CONTACT US
For more information and to locate the office nearest you, visit solarturbines.com, call +1-619-544-5352 or email infocorp@solarturbines.com.