

LIFECYCLE SUPPORT FOR YOUR SOLAR TURBINES EQUIPMENT SERVICE THAT POWERS YOUR FUTURE



A Caterpillar Company

HELPING YOU SUSTAIN WORLD-CLASS PERFORMANCE

The Solar Turbines culture of customer care supplies you with comprehensive service that saves money and extends the life of your equipment for decades. We've been meeting the ever-changing industry challenges for more than 90 years, so you can rely on us to help you succeed. Solar has the largest installed base of equipment and supports our customers with expert staff and offices strategically placed around the world. We also offer long-term service agreements, an easily accessible original equipment manufacturer (OEM) parts store, and a variety of in-house and on-site training options.

Keeping you up and running with minimized downtime drives our success. No matter what your needs, Solar's experienced service team is ready to assist whenever — and wherever — you need it. Everything you need to keep your Solar equipment working is just a click or call away.



FIELD SERVICE THAT MAXIMIZES PRODUCTIVITY

Solar's global team of Field Service Representatives (FSRs) work in more than 60 field offices around the world to assist our customers and their growing needs for greater productivity. The Solar team of experts provides technical assistance for any of the electrical, mechanical, controls and process issues associated with your equipment.

Solar's FSRs continually update their technical skills knowledge and expertise so you receive state-of-the-art turbine system repair and maintenance. Solar FSRs work directly with you to choose from our catalogue of recommended spare parts to keep your equipment up and running. Additionally, the Solar Turbines PartStore is available around the clock at **shop.solarturbines.com**. Getting recommended spare parts from the OEM helps ensure quality and instills confidence that maintenance is performed with the best possible equipment.

Field service support includes:

- Around-the-clock service coverage
- On-site engine/subassembly replacement
- Start up and commissioning
- Preventive maintenance
- Infield evaluation and trending
- Electrical, mechanical, controls and process support



DIGITAL SOLUTIONS THAT ENABLE YOUR SUCCESS

Solar delivers on technology's promise of increased efficiency and boosted profits with our Equipment Health Management products and services. The benefits are more production hours, less downtime and shorter service intervals. Solar's digital solutions are key to maximizing machinery uptime and lowering lifecycle costs. We have the platform and mobile capabilities that make us an effective partner for your digital transformation journey.

INSIGHT PLATFORM TECHNOLOGY

InSight Platform[™] is designed to deliver advanced remote capabilities and decision support tools that complement your existing operations.

InSight Platform benefits include:

- Measurable performance
- Real-time troubleshooting tools
- Predictive analytics
- Optimized maintenance and overhaul
- Risk sharing
- Dedicated fleet management
- Convenient mobile access via InSight Connect[™], Solar's highly secure connectivity architecture





TRAINING THAT ENSURES YOUR SUCCESS

TECHNICAL TRAINING

Technical training from Solar Turbines features highly qualified and experienced instructors using a practical approach to improve performance and reliability. The comprehensive programs feature hands-on training with state-of-the-art equipment while our instructors teach curriculum based on proven learning techniques. Studying with our instructors will provide you with knowledge that will help you lower maintenance costs and enhance process operations. Courses are available at foundational, intermediate and advanced training levels.

E-TRAINING

Operators and technicians of Solar Turbines packages with generator or compressor applications can learn remotely. This is a convenient option to improve knowledge, enhance skills and reinforce learning from hands-on and classroom training.

ROLE-BASED LEARNING

Solar has prepared role-based training programs that focus on the skills, tools and knowledge needed to support the various operations, maintenance and engineering roles in your organization.



EQUIPMENT OPTIMIZATION

Our customers rely on equipment from Solar Turbines to operate at peak performance. Package upgrades that take advantage of the latest technology and options available will keep your equipment working at maximum efficiency and productivity. There are a number of ways Solar can optimize your equipment throughout its lifecycle.

PACKAGE SYSTEMS UPGRADE

Solar offers engineered package system upgrades and retrofit kits for turbines, compressors, mechanical-drive and generator package sub-systems to improve equipment reliability and sustainability. Fast, efficient and cost effective, these upgrades revitalize and enhance your turbine package. The Turbotronic[®] control system and pre-engineered system modules take advantage of the latest advancements in turbine and control systems technology.

CONTROL SYSTEMS UPGRADE

If your gas turbine has an outdated control system, you have the option to upgrade to the latest Turbotronic programmable logic controller-based technology. This control system offers improved reliability, increased cybersecurity, enhanced operational flexibility, and HMIs with a user-friendly interface and expanded communication capabilities.

Solar can address any concerns about your controls and provide flexible solutions to meet operational and financial requirements.



SOLONOX ENGINE UPGRADE

Converting to the SoLoNOx[™] dry low emissions combustion system can reduce emissions at your site, helping you meet or prepare for government regulations in addition to providing more operating flexibility and improving local air quality. Since its introduction in 1992, the SoLoNOx combustion system has been included on more than 3,500 turbines, avoiding the creation of more than 8 million tons of NOx emissions worldwide. A SoLoNOx upgrade can be conveniently executed at the time of engine overhaul or exchange.

GAS BOOST COMPRESSOR RESTAGE AND OVERHAUL

Restaging or overhauling your compressor can dramatically improve performance and provide a significant return on investment. Compressor restages also improve head-making capabilities, surge margin and gas production efficiency, increasing flow range and prolonging total system life.

TURBINE PACKAGE REFURBISHMENT

Solar restores and upgrades packages whether you require the use of existing assets, have footprint constraints or need a complete package with very short delivery time. This involves upgrading the equipment to the latest technology, providing a flexible solution that maximizes the value of your assets, improves efficiency and reliability, and increases horsepower.

FLEET ASSESSMENT SERVICES

This comprehensive machinery assessment service provides data-driven analysis performed in collaboration with your needs. Our goal is to improve the asset integrity of your turbomachinery to optimize performance in the most cost-effective manner. This begins with an OEM on-site health assessment and sustainability analysis. The Solar team discusses solutions with you to make intelligent, data-driven decisions for equipment safety, reliability, performance and lifecycle management — benefits that optimize value, reduce risk, extend product life and increase production.

ENGINE POWER UPRATE

Increase the power of your gas turbine to match your current energy needs with better efficiency. Performing this upgrade during the overhaul of your gas turbine is a cost-effective way to increase productivity. Gain the benefits of product enhancements that can lead to additional power, improved emissions levels, and increased safety, operability, reliability and durability.



GAS TURBINE ENGINE OVERHAUL SUPPORT THROUGHOUT THE LIFECYCLE

Solar provides overhaul support for our entire product line of gas turbines. With more than 60 years of experience conducting more than 30,000 overhauls, we have the experience to provide the highest quality overhaul available. Solar provides exclusive access to current engineering specifications and the latest OEM design improvements, ensuring the overhauled turbine includes the latest available technology.

ENGINE EXCHANGE PROGRAM

Solar delivers more than 800 exchange engines every year. Approximately 80% of our overhaul customers choose this program because their equipment is back in operation in as little as two days. The exchange consists of replacing your engine with a fully renewed engine that is rigorously tested and certified to same-as-new specifications. Our exchange fleet of engines, parts and tools is strategically stored around the world to eliminate costly downtime.





TURBINE PACKAGE PERFORMANCE UPGRADES

Uprating the power or adding SoLoNOx technology to your Solar turbomachinery can enhance performance, reliability and maintainability while improving durability, safety and environmental compliance. The result is improved production and increased profit.

Customers have the option of upgrading at the time of overhaul through Solar's exchange program, and an exchange unit can be provided at a higher power rating or with a SoLoNOx conversion. This option minimizes downtime while increasing efficiency, productivity and sustainability.

FLEXIBLE OVERHAUL AND REPAIR SOLUTIONS

Customers may bring their engines to Solar's manufacturing facilities for repairs. An alternative solution that Solar offers is having our team come to you. Our factory-trained field repair specialists can be at your site on your schedule to get your equipment up and running.

UNMATCHED SERVICE CAPABILITY

Solar Turbines has offices and support staff conveniently located around the world — FSRs, Regional Field Engineers, Fleet Managers and service parts sales staff in additon to service parts warehouses and repair, refurbishment and overhaul facilities. All located in your region to provide around-the-clock service and support.

LONG-TERM SERVICE IS OUR CULTURE OF CUSTOMER CARE

Solar offers standard and customized service solutions that provide full lifecycle support for your equipment. We will work directly with you to develop a service agreement that provides the suite of services and products you need to keep your equipment performing at peak levels.





Our experienced parts staff members are available around the clock with one-on-one support to help you understand what parts are needed to get you up and running as quickly as possible. Our specialists are also available to work with you to optimize the parts you stock. This minimizes your cost and can prevent unplanned downtime. Solar continually updates its parts catalogue with the latest technology for enhanced reliability that extends the lifecycle of your gas turbine and compressor.

YOUR ONE-STOP SHOP FOR GENUINE SOLAR TURBINES PARTS

Visit the Solar Turbines PartStore at **shop.solarturbines.com** to be confident in the quality of your parts. You can find complete service maintenance kits for your Titan,[™] Mars,[®] Taurus,[™] Mercury,[™] Centaur[®] or Saturn[®] turbomachinery packages. Our store offers consumable, routine and preventative maintenance spare parts in addition to parts for compressor sets, pumping sets, speed reducer gearboxes, accessory drives and fuel systems.

SERVICE THAT POWERS YOUR FUTURE

The worldwide sales and service organization at Solar Turbines is dedicated to your success. Our culture of customer care is the foundation of our commitment to the highest quality customer experience — from your initial inquiry throughout the lifecycle of your equipment. The Solar team is dedicated to ensuring reliable, efficient performance that precisely fits your needs. Find out more about our lifecycle support solutions at **SolarTurbines.com**.



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.

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