PSM
a Hanwha company

Innovative Clean Energy Solutions for Future Generations

9E Products and Solutions

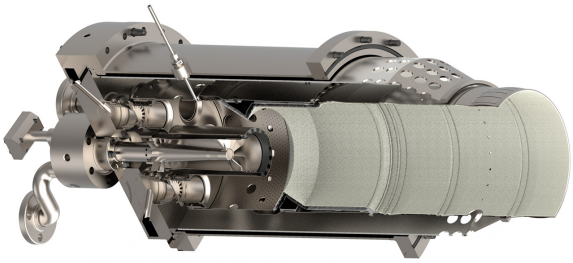
Innovative solutions for heavy duty frames to lower emissions, extend life, and more

PSM enables power plant operators to meet their business profitability goals while reducing carbon emissions to comply with decarbonization objectives.

Full Service Solutions for the 6B Portfolio

PSM offers a comprehensive, integrated solution that combines the engineering expertise and innovative offerings of independent service provider Thomassen Energy. Our extensive range of services includes field support, repair services, spare parts provision, cutting-edge upgrades, training programs, and long-term service agreements. We aim to cater to the energy sector globally, providing support for a wide array of power generation equipment.

Our products deliver improved durability, high performance, and lower life cycle costs. This is achieved through PSM's advanced component and system-level modeling and data analytics tools, which help us identify issues, failure modes, and areas for improvement.



CROSS SECTION VIEW. LEC-III™ IS NOW AVAILABLE ON MOST ENGINE MODELS.

Parts and Components

At PSM, we specialize in providing support for the 9E gas turbine, offering a variety of components including for the hot gas path compressor, and numerous auxiliary parts, all designed to enhance your turbine's performance.

Our hot gas path components are specifically engineered to accommodate the latest 2085F configurations, ensuring your turbine benefits from the advanced aero design of the third stage bucket and nozzle, aimed at improving heat rate and power output.

Coatings

We offer a selection of coatings tailored to meet the needs of your turbine. These coatings effectively manage metal temperatures and provide robust protection against corrosion and oxidation.

All components for the 9E gas turbine we offer include necessary installation hardware and diaphragms. These parts are suitable replacements for original equipment manufacturer (OEM) parts and are compatible with older models of gas turbines.

Consultations and Maintenance

Typically, the hot gas path of the 9E Frame gas turbine requires maintenance every 24,000 fired factored hours (FFH) or 900 fired starts (FS). However, by working with PSM's experts, these maintenance intervals may be extended, evaluated individually for each unit.

Hot Gas Path Parts Solutions

We offer Frame 9E hot gas path components such as buckets, nozzles, shrouds, and hardware. By utilizing our component and system product modeling along with data evaluation tools, we enhance durability and reduce life cycle costs by identifying issues and failure modes in existing OEM designs.

Our manufacturing process ensures that all buckets, nozzles, and shroud blocks are compatible with the latest machines operating at a firing temperature of 1140°C (2084°F), while also being compatible with older models. Under normal conditions, the entire hot gas path requires maintenance every 24,000 FFH, which can be extended to 32,000 FFH per unit through expert consultation.

Installation hardware and alternative coating options are available to accommodate specific operational conditions, such as those involving heavy corrosion.

Buckets

1st Stage:

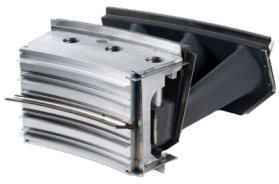
+ Interchangeable with GE P/N 314B7168G013
+ Base Alloy-111-EA
+ MCrAlY airfoil coating plus internal aluminide diffusion coating
+ 11-cooling hole (8 turbulated)design with vented tip to allow for increased inlet temperatures.

2nd Stage:

+ Interchangeable with GE P/N 314B7169G015
+ Base Alloy-111-EA
+ 6 camberline cooling hole design with scalloped tip shroud and cobalt base hardface material on the z-notches.

3rd Stage:

+ Advanced aero design interchangeable with GE P/N 314B7170G014
+ Base Alloy-738-LC
+ Advanced airfoil shape designed to achieve an imporoved hear rate and power output if used in combination with the advanced airfoil 3rd stage nozzle



9E 1ST STAGE NOZZLE

9E 3RD STAGE BUCKET

Nozzles

1st Stage:

+ Interchangeable with GE P/N 109E7636G015
+ Base Alloy-414
+ Chordal hinge design to minimize cooling air leakage with optional TBC/MCrAlY coating depending on operating conditions

2nd Stage:

+ Interchangeable with GE P/N 119E2064G001 or 119E2064G024 (brush seal)
+ Option available for brush seal design
+ Nozzle - Base Alloy-939-mod
+ Diaphragm – AISI 410
+ Brush seal configuration will generate an increased power output and improved heat rate. Standard configuration nozzles are coated with Al-Si diffusion coating to enhance oxidation resistance

3rd Stage:

+ Advanced aero design interchangeable with GE P/N 131E3123G007
+ Base Alloy-939-mod

Before delivery a harmonic analysis is conducted on all nozzles to verify the assembly sequence. Nozzles are fully interchangeable with other GE group numbers without any modification to the gas turbine.

Rotor Management Solutions

Capitalizing on a portfolio of rotor and blading design upgrades, along with full 3D steady-state and transient analysis models, PSM offers a comprehensive exchange rotor service. With a PSM Lifetime Extension (LTE) rotor, you can minimize downtime and optimize your capital investment.

Capabilities

+ Unstack and deblade
+ Reblade and tip grind new blades
+ Compressor clocking optimization
+ Patch ring repairs
+ Complete rotor structural analysis to support repairs
+ Seed rotor to support rotor exchange program

TURBINE ROTOR IN STACK

Rotor Scope Comparison - Go Beyond Typical Repair for Understanding Risk of Continued Operation

Advanced NDE *Assessment*

+ Full metallurgical and surface inspection

Lifetime *Extension*

+ Tailored programs based on frame-specific full transient structural analysis
+ Evaluation of component assessment findings with analytical models
+ Comprehensive analysis to define re-work of findings to enable extended operation
+ Lifetime Extension Recommendation
+ Currently available for 7F, 501F, 7E, 6B

Activity		Standard Rotor Repair	Advanced NDE Assessment	Lifetime Extension
Rotor Disassembly and Blast Clean		✓	✓	✓
Surface Penetrant Inspection		✓	✓	✓
Ultrasonic Inspection			✓	✓
Eddy Current			✓	✓
Metallurgical Evaluation	Microstructure Replicas		✓	✓
	Material Hardness		✓	✓
Screening for Reassembly Risks				✓
Evaluation of Inspections Findings	Low Cycle Fatigue			✓
	Creep			✓
	Fracture Mechanics			✓
Extension Enabler Finding Re-work Proposals				✓
Lifetime Extension Recommendation				✓

Rotor Lifetime Extension Management Program

PSM offers customers a rotor management solution that capitalizes on PSM's engineering expertise while utilizing PSM's impressive design history of the 6B unit and all its iterations. Our Rotor Lifetime Extension utilizes full 3D steady state and transient analysis models combined with advanced NDT inspections in accordance with a complete rotor overhaul. Should indications be found or upgrades deemed necessary by engineering review of past and future run parameters, PSM can offer replacement discs and components to achieve longer life and higher efficiency

Life Time Extension

PSM's Rotor LTE program extends the useful lifetime of your rotor. Leveraging advancements in computing power, material properties, fracture mechanics methodologies, and inspection techniques, it is now possible to assess the potential to run rotors beyond their original published limits.

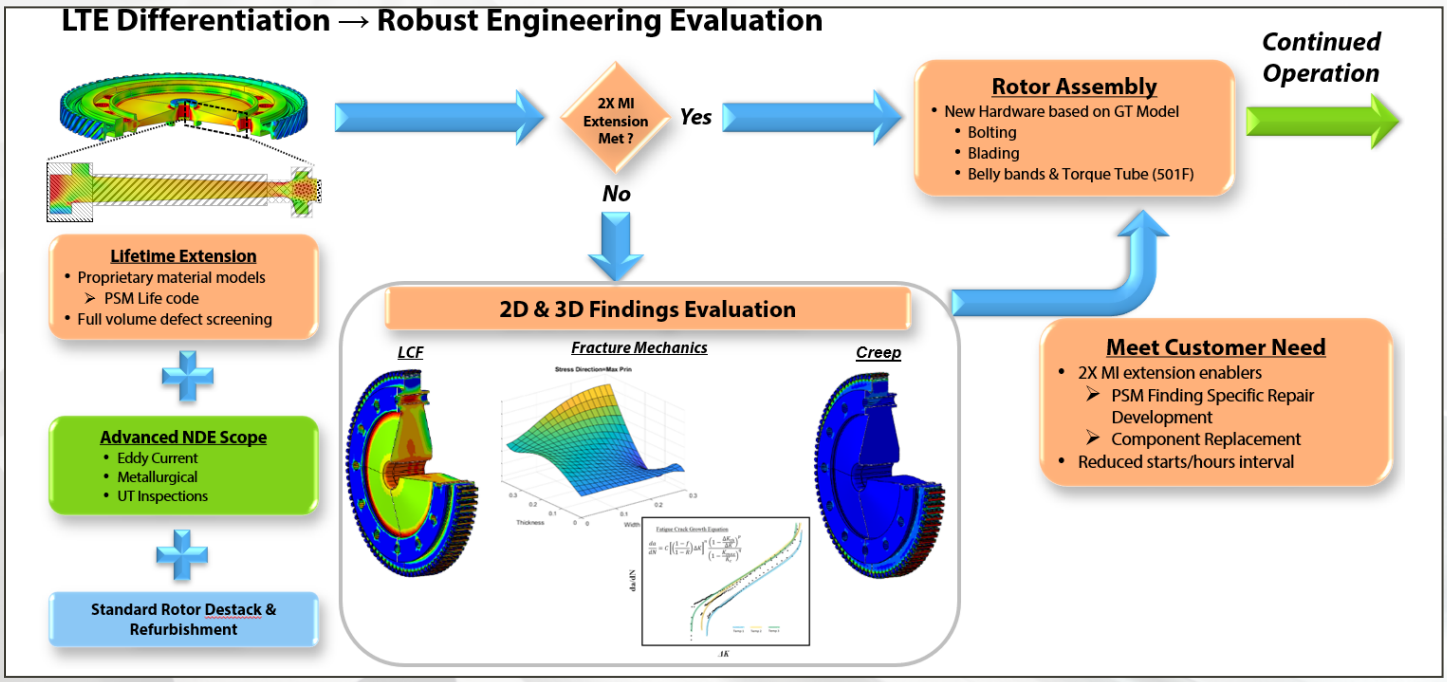
Rotor LTE is enabled by:

+ Advanced non-destructive inspection techniques to detect surface and volume flaws.
+ Complete rotor material characterization.
+ Full 3D Finite Element Analysis (FEA) models for thermal and structural analysis.
+ Inspection results and operational history fed back to the FEA model.

Any problematic flaws identified are analyzed, and a report detailing the predicted remaining rotor capability is generated, empowering owners to make informed decisions about their rotor assets.

SEED ROTOR INSTALLED WITH NEW ROW 9-17 COMPRESSOR WHEELS

Lifetime Extension Program



9E Advanced Combustion Solutions

PSM Thomassen has created combustion technologies tailored to meet global market requirements. Given significant environmental issues, reducing emissions is a key focus for the industry. We have designed several alternative systems to address this need. Our dry low NOx systems have set numerous emission reduction records. Simply replacing conventional turbine combustion with this system can significantly reduce CO and NOx levels in the environment.

Product Offerings:

Combustion Liners, Fuel Nozzles, Transition Pieces

+ LEC-III™ and T-DLN
  - » The LEC-III™ Combustion System can achieve ultra-low emissions, as low as under 4ppm.
  - » T-DLN is a cost-effective alternative to OEM DLN-1, offering 9ppm NOx and dual fuel capability with direct replacement compatibility.
+ Digital Solutions and Control Systems
+ Multi-Fuel Compatibility
+ Operational Range Options including Inlet Bleed Heat (IBH) and Exhaust Bleed (ExB), allowing operation as low as 40% of capacity.

T-DLN Combustion System

Dry Low NOx System

PSM provides the T-DLN system for customers using dual fuel and those without stringent emissions requirements. The Dry Low NOx combustion components are designed by PSM, leveraging their extensive experience in manufacturing, repairing, commissioning, converting, and maintaining gas turbines equipped with Dry Low NOx and Low Emission Combustion technologies.

These components can be supplied individually or as a complete system, suitable for replacing existing DLN systems or converting standard diffusion-type combustors.

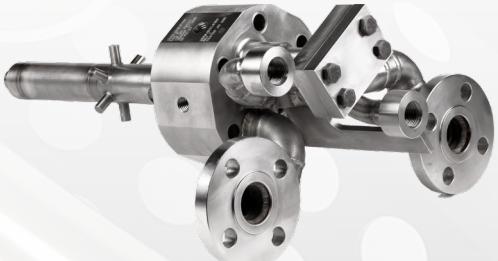
6B DLN CAP & LINER

AT-DLN Operational Information

Emission levels achieved at base load for all models:

+ Gas fuel: 9 ppm NOx and 9 ppm CO
+ Liquid fuel: 42 ppm NOx with water injection
+ Premix operating range typically 75% to 100% load
+ Turndown with bleed heat system to 50% load

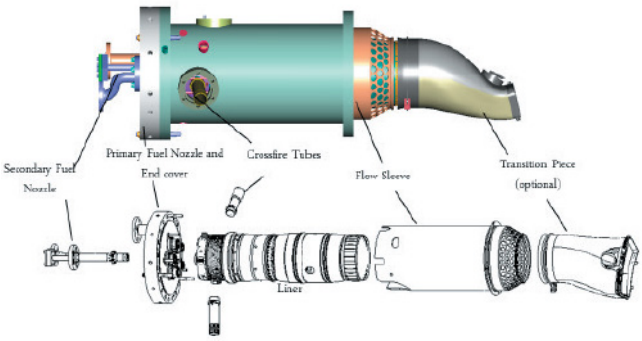
9E DUAL FUEL PRIMARY FUEL NOZZLE



6B SECONDARY FUEL NOZZLE

LEC-III™ Combustion Systems - Ultra Low Emisssions

With the introduction of the first LEC generation, we have continuously developed new combustion technology to drive emissions to ultra-low levels. Our patented and innovative technologies have enabled the current LEC-III™ systems to operate with NOx levels as low as <3ppm on natural gas, low single-digit CO, low combustion dynamics, and a wide range of compliant turndown from base load conditions. The LEC-III™ system can be implemented as a drop-in replacement, conversion, or individual parts replacement for existing OEM DLN1 systems.



Field Proven 3-5 PPM NOx

The patented LEC-III™ combustion technology, developed, and manufactured by PSM, guarantees sub-5 parts-per-million (ppm) NOx emission levels when operated on natural gas over the entire premix operating range, from baseload down to 80% relative load (respectively 50%-60% with Inlet Bleed Heat system). CO emissions under these conditions are typically measured in the low single digits to meet customer requirements.

Three key design features in the LEC-III™ combustion system enable this improved process and fundamentally differentiate the LEC-III™ from the OEM design: the forward flowing venturi, effusion cooling technology, and anadvanced secondary fuel nozzle (SFN).

Summary of Design Features (Forward-Flowing Venturi Design)

The venturi acts as the main flame anchor while the combustor operates in premix mode. The OEM venturi design releases spent cooling air at the aft end, mixing with reacting/combustion gases to cool local reaction temperatures, preventing CO from fully oxidizing to CO2. The forward-flowing venturi design injects cooling air at the downstream/aft end, flowing toward the primary zone and discharging into the premixer where it combines with the fuel and air mixture prior to combustion. This results in a leaner fuel-air mixture, producing less NOx and significantly reducing CO levels.

Effusion Cooling Technology

Effusion cooling uses both conduction and convection, allowing more efficient use of combustion air than the OEM slot-cooled impingement method. Less air is needed to cool the liner compared to the OEM design, enabling more air to mix into the bulk fuel/air mixture via the premixer dilution holes. This improves mixing and creates a leaner combustion mixture, reducing NOx generation.

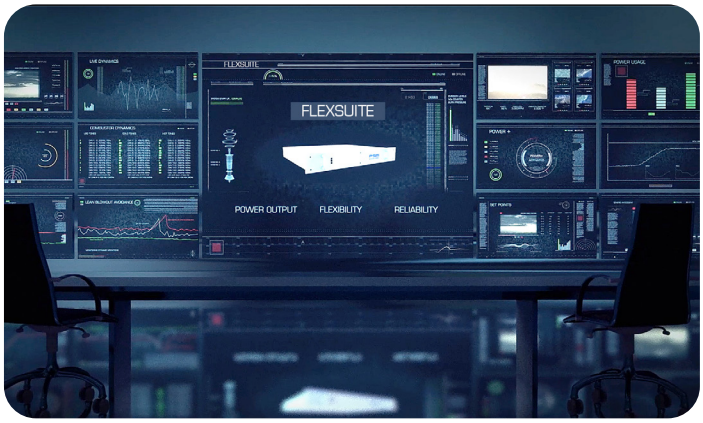
Advanced Secondary Fuel Nozzle Design

The patented Fin Mixer SFN design eliminates the diffusion flame at the pilot nozzle tip found in the current OEM combustion design. This eliminates a small but very hot tip burning zone responsible for a disproportionate amount of NOx formation.

Digital Products

Maximizing Plant Performance

PSM's Digital Technology Portfolio maximizes your plant's performance before, during, or after large equipment upgrades. Often, combining multiple engineered systems creates overlapping redundancy, which, when fully understood, provides significant optimization potential. Over the last decade, PSM has combined our domain expertise in GT technology, combustion system design, engine upgrades, engine operation from the PSM Monitoring & Diagnostics (M&D)Center, and controls logic experience with balance of plant operations and advanced controls methods to create innovative optimization tools. Using proprietary and patented controls blocks, we offer multiple optimization features tailored to your individual needs.



FlexSuite and AutoTune

A portfolio of applications for your existing controller, FlexSuite from PSM, provides digital optimization for your power plant operations. Whether you seek operational reliability improvements or increased operational flexibility, there are multiple optimization features offered to suit your individual needs.

FlexSuite Building Blocks

+ Combustion Optimization
+ Start-up / Shut-down Optimization
+ Enlarged Load Range
+ Efficiency and Lifetime
+ Fuel Flexibility
+ Grid Support
+ Service Flexibility

Virtual FlameScanner

DLN1.0 & DLN2.6 System Reliability

Feedback on the presence of flame in the combustor is critical to engine reliability. Our Virtual FlameScanner eliminates common issues with B/E and F Class optical flame detectors. By replacing the standard optical flame scanners with data from the exhaust temperature sensors, it is possible to reduce maintenance efforts and improve overall system reliability.

AutoTune

Intelligent GT combustion optimization for emissions and combustion dynamics while maximizing operational range and fuel variation. Utilize in conjunction with FlexSuite, FlameSheet™, and GTOP™ to maximize the optimization potential.

System Features

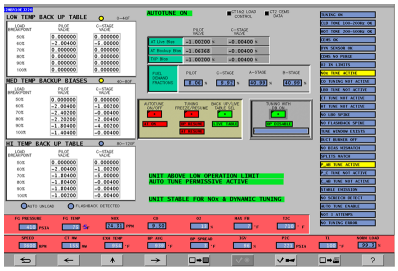
+ AutoTune is an expert advisory system that provides extra level of intelligent protection to your existing controller
+ External to control system
+ HMI screen seamlessly integrated
+ Patented learning algorithms eliminate the need for seasonal tunes and provide significant system enhancement.

Tuning Optimization

+ **Dynamics:** Improved hardware life and Lean Blow Out mitigation
+ **Emissions:** Consistent emissions even with atmospheric/climate/seasonal changes at varying load points
+ **Learning:** Intelligent learning of known operational points reduces the need for tuning and minimizes errors
+ **Transient tuning:** Adapts to cycling of units and responds to dynamic changes.
+ **Trip Avoidance:** Provides ultra-fast reaction if the combustor is flaming out to prevent a trip.

AutoTune Learns

Patented learning algorithms capture information from successful and unsuccessful tuning events. Over time, AutoTune learns and significantly reduces the need for tuning under similar operating conditions.



AUTOTUNE SCREEN DISPLAY

Operational Flexibility

With PSM's patented algorithms, it is possible to maximize the GT output according to climate conditions and actual system performance. For example, if you want to maximize seasonal peak power potential, Peak+ continuously seeks to maximize the load range while maintaining emissions and dynamics. Three optional modes are available:

+ **Power+:** Current firing temperature range with no impact on hardware life
+ **Peak+:** Option for increased peak firing mode to achieve greater improvements, with some hardware lifetime debit
+ **Turndown:** Minimizing low load point by maintaining output just above premix transfer

While running on AGC or remote dispatch: Peak+/ Power+, Turndown & Transient Tuning all active during Automated Generation Control and do not require stable load conditions before optimizing.

Extended Turndown

+ Dynamic optimization of unit minimum load
+ AutoTune monitors emissions and combustion dynamics to safely meet load target or hold at lowest safe point of operation
+ Integrated with both manual load control or AGC drive load targets
+ Learns over time by saving ambient condition profiles, allowing for quicker load ramp when revisiting safe operating points

Fuel Flexibity

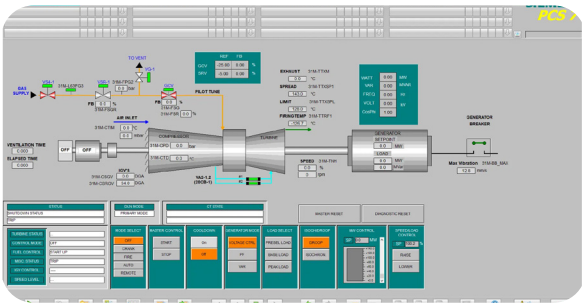
Three levels of fuel flex technology are available offering +/- 2% MWI range improvement, does not require fuel gas chromatograph or any kind of combustion system modification. These optional modules allow multiple fuel supplies to be switched with the GT online, keeping

+ FGT (Fuel Gas temperature): reduces Fuel Gas temperature to minimize hot tone dynamics
+ FPP (Fuel Property Parameter) table to enable extra dimension of tuning intelligence if distinct variations in fuel are detected (eg multiple sources of Fuel Gas)
+ FTO (Fuel Temperature Optimization) utilizes a high performance fuel gas heater to actively manage the wobbe range of the fuel

Control Solutions from PSM

TC7 Control System: Advanced Heavy-Duty Gas Turbine Control System

The TC7 gas turbine control system represents an advanced solution resulting from extensive research and development efforts. It builds upon the established design of Siemens® PCS7 series DCS, offering the most recent iteration of controllers for



Advantages of TC7

+ **Industry Recognition:** TC7 gas turbine controllers have gained widespread acceptance among industry professionals due to their exceptional safety features and adaptability.
+ **Adaptable Structure:** The modular configuration of TC7 ensures its suitability for various turbine applications.
+ **Accessible Design**: TC7 features an open-architecture design and utilizes standard, widely available hardware, facilitating easy maintenance and repair of the control system.

TC7's Impact on Plant Reliability

In the current competitive power industry, plants face challenges in maintaining relevance and profitability. They must operate at full capacity for extended periods to meet consumer needs, which can be particularly challenging for older systems.

To address this issue and enhance performance and reliability cost-effectively, upgrading your gas turbine's control system with our advanced TC7 is a viable solution.

TC7 provides the necessary hardware and software flexibility to help your plant remain competitive, reliable, and successful.

TC7 Enhances Gas Turbine Performance and Integrated Safety

Our TC7 is cost-effective, efficient, and reliable. This control system can be customized for various hardware components and software configurations, promoting plant flexibility and profitability.

While TC7 is based on Siemens' PCS7 platform, we are platform independent and have the flexibility to adapt to your specific requirements.

TC7 improves your gas turbine's performance and provides peace of mind. Its open-architecture design and use of common hardware help reduce maintenance costs while delivering high-quality performance.

Additionally, our control system solution incorporates safety features that comply with the stringent VDMA-4315 standard, derived from IEC-61508.

To further enhance your plant's efficiency and performance, you can incorporate our FlexSuite and AutoTune solutions with your TC7 using digital technology.

TC7's Modular, Interchangeable, and Open Design

Our TC7 modular control system, based on Siemens® PCS7 series DCS, is designed for user-friendliness. Its open design offers several advantages:

+ Seamless integration into existing or new systems.
+ Backup system to minimize downtime during modifications.
+ Highly reliable hardware, thoroughly tested and verified by our experts.
+ Software I/O modules that can be integrated without extensive hardware knowledge.
+ For plants with older Mark I, II, IV, or V systems, TC7 can be replaced without requiring significant mechanical alterations, and with minimal changes to electrical and instrumentation aspects.

TC7 CONTROL SYSTEM

Global Repair & Field Services • 24/7

Field Service

PSM provides fully integrated outage services delivered by a team of professionals skilled in turning overhauls around quickly, safely, and with high quality. We support a wide range of power generation equipment, offering:

+ OSHA Compliant Safety Program
+ Detailed Outage Planning
+ Customized Tooling
+ Emergency Response Team
+ Control/Combustion Tuning
+ Instrumentation Support
+ Valve Calibration
+ Customized Work Instructions & Quality Plan
+ Foreign Material Exclusion Procedures
+ Field Inspection & Assessments
+ Detailed Lessons Learned & Improvement Plans

Repair

PSM, together with PSM in the USA, PSM in the Netherlands, and Hanwha Power Systems in South Korea, offers global repair services for industrial gas turbines across B, E, and F-class fleets. Our capabilities include:

+ Robotically controlled welding

+ Chemical Stripping
+ Full Metallurgical Laboratory with Engineering Services
+ Brazing
+ FIC Cleaning

+ Qualified fixture check for all components
+ Robotically controlled coating
+ Flow testing, gas and liquid, including B, E/EA, and F-class and DLN

+ Heat treatment
+ 24-hour engineering and shop support
+ Use of the latest Qualified Procedures/Processes

+ State-of-the-Art Equipment
+ Spare & Emergency Parts Warehouse
+ Lifetime assessment of components and rotors

Service Capabilities including Monitoring & Diagnostics

PSM services a diverse portfolio of GT components, control and combustion system platforms

+ Reliable coverage from basic support through complex root cause analysis.
+ Service Engineering extends beyond traditional support to incorporate best practices from all platforms & systems.
+ Strong processes & infrastructure position PSM to further grow capabilities.

Engineering Assessment

+ A dedicated team supports our Field Service, Project Management, Sales & Tendering, R&D, Fleet Management, Global Execution Centers, and Customers.
+ Over 400 events per typical outage season evaluated and answered.

Team access to all parts of the PSM organization ensures quick event disposition.

Tuning and Commissioning

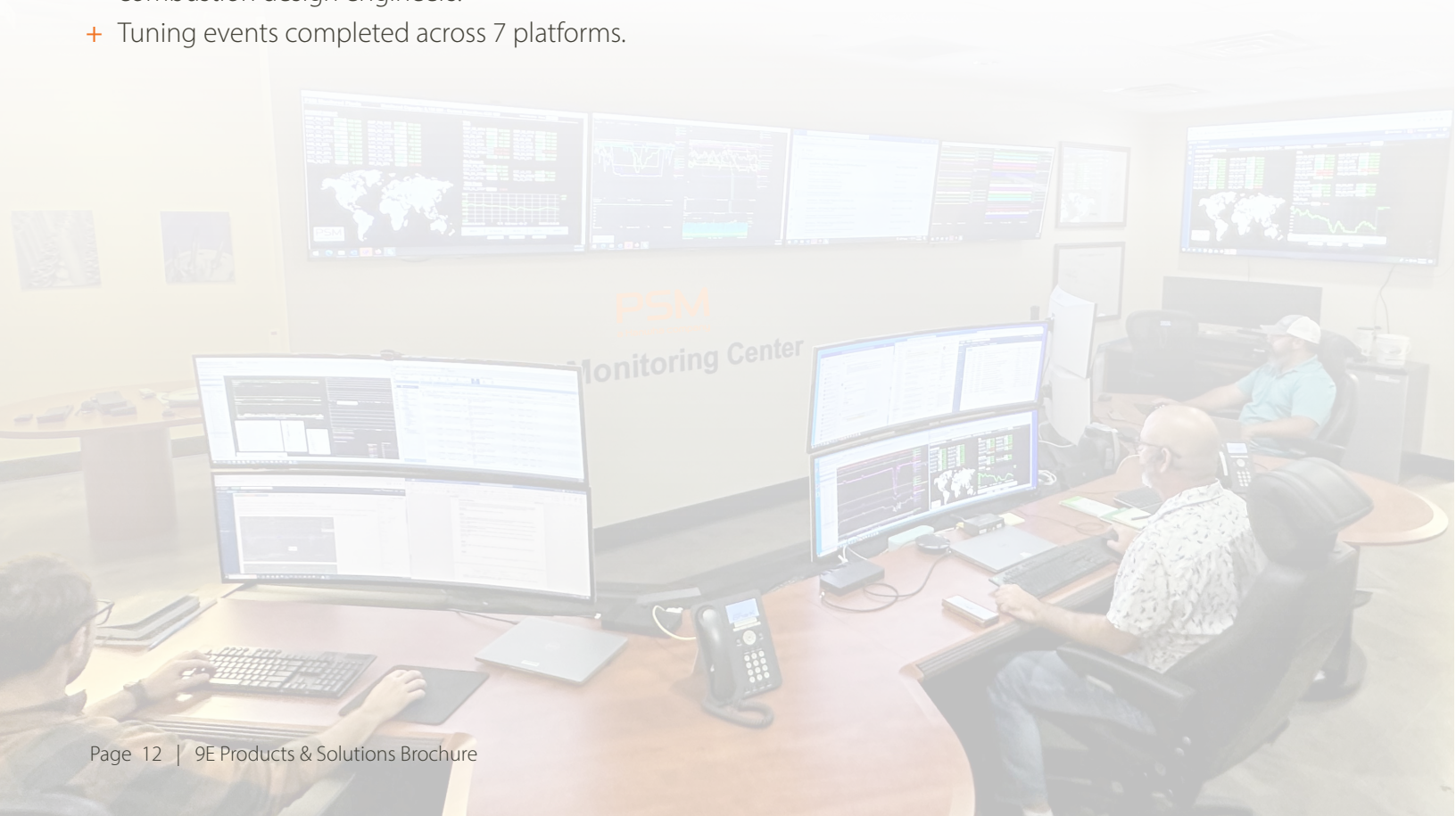
+ Over 200 tunes per year across a wide variety of combustion technology and control systems
+ Strong expertise in both OEM & PSM Combustion systems.
+ In-house knowledge base and access to combustion design engineers.
+ Tuning events completed across 7 platforms.

Monitoring and Diagnostics

+ Over 50 units and 10 GW monitored.
+ Global cloud-based infrastructure with redundancy.
+ 24/7 Monitoring.
+ Monthly Operational Assessment Reports (OAR's) included monitoring of customer-selected parameters.

Controls Design and Development

+ Controls-related services across seven different platforms.
+ Support customers and PSM technology initiatives.
+ Designed to support controls replacement, expansion projects, or technology development.
+ Assesses operational and protective schemes and communication protocols.



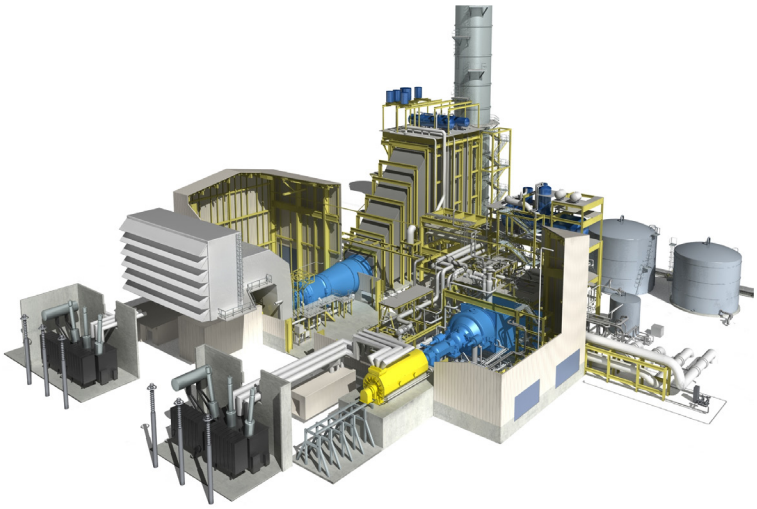
Plant Assessment for Comined Cycle Power Plants

In the current competitive power generation market, plant operators are driven to enhance output, boost efficiency, and reduce operational expenses. They often implement improvements and upgrades to the original equipment design to achieve these objectives. When considering investments in performance enhancements, it is crucial to view the power plant as an integrated system.

Benefits

A PSM Plant Assessment offers valuable insights to:

+ Confirm that equipment and systems are compatible with proposed upgrades
+ Optimize asset potential
+ Evaluate real-time conditions and performance
+ Enhance operational flexibility
+ Project life expectancy
+ Control emissions profile



Component Evaluation

Gas Turbine

+ PSM enhancement options
+ Performance and efficiency improvements
+ Exhaust characteristics

Heat Recovery Steam Generator

+ Design constraints for pressure components
+ Areas prone to accelerated corrosion due to flow
+ Capacity of temperature control systems

Steam Turbine

+ Steam pathway examination
+ Thermal and mechanical stress boundaries
+ Performance and efficiency improvements

Generator

+ Functioning at peak output
+ Operational limits and cooling constraints
+ Magnetic field saturation thresholds

Balance of Plant

+ Effectiveness of environmental control measures
+ Capacity of control valves, pumps, heat exchangers, and safety valves

Modeling & Analysis

PSM conducts a comprehensive power plant analysis for various operational and environmental conditions, considering:

+ Original and enhanced heat balance designs
+ Model adjustment to current equipment state
+ OEM and model-based upgrade potential for key components
+ Capability of auxiliary systems and components

+ Plant Assessment Report

The assessment report provides:

+ Current and upgraded plant thermal performance comparison
+ Emissions overview and environmental effects
+ Equipment and operational constraints and suggestions
+ Support for business case development

Long Term Agreements

Summary of Offerings

As a leading parts provider, PSM offers comprehensive and flexible Long Term Agreements for 7F, 501F, 6B, and 7E models, aimed at reducing lifecycle costs for the end user. Our engineered part designs increase component life and extend program intervals, eliminating inspections and providing significant cost savings over the contract's life. Additionally, our improvements to OEM designs and reconditioning processes reduce the fallout of hot gas parts. PSM has also assembled a highly skilled and experienced field service team capable of industry-leading outage performance.

Flexible Agreements — to fit the customer needs

Types of PSM Service Agreement Offerings			
Included Product Offereings	**Long Term Agreement (LTA)**	**Long Term Maintenance Agreement (LTMA)**	**Frame Agreement**
Parts Supply	✓	✓	✓
Reconditioning	✓	✓	✓
Field Services	✓	✓	Optional
Monitoring & Diagnostics (Remote Monitoring)	✓	Optional	Optional
Contract Manager	✓	Optional	Optional
Inventory Management	✓	✓	Optional

PSM has developed a flexible concept for Long Term Agreements tailored to meet dynamic market conditions and customer needs. Our agreements aim to offer competitive pricing and leverage the full portfolio of PSM offerings. They can include not only gas turbines but also generators, steam turbines, and auxiliary systems. The focus is on optimizing maintenance budgets, guaranteeing part life, minimal parts fallout, coverage during unscheduled inspections, inventory control, and proactive contract management for total coverage.

In summary, our diverse agreement offerings are designed to optimize your maintenance budget. They provide competitive guarantees on parts life, minimal parts fallout, comprehensive coverage during unscheduled inspections, effective inventory control, and proactive contract management, all to ensure complete coverage.

Scope of Supply — based on the customer requirements

Customers define the scope of Long Term Agreements, which can range from full service to specific pricing agreements. Services offered by PSM include:

+ Parts Supply
+ Reconditioning
+ Field Services, including craft labor
+ Monitoring & Diagnostics (e.g., Remote Monitoring)
+ Contract Management
+ Inventory Management
+ Parts Tracking
+ Engineering Assessments
+ System Technical Support
+ Emergency Response

Global Services Overview

PSM integrates combustion dynamics expertise, Low NOx combustion alternatives, airfoil design, and comprehensive power plant operation solutions with our 6B gas turbine manufacturing heritage. We provide dynamic solutions for 6B units, from initial models to advanced upgrades featuring controls and DLN system modifications, aimed at extending hardware lifespan and improving power plant return on investment.

Combustion:

LEC-III™ and T-DLN options are customizable using our FlexSuite products to address ultra-low emissions and single or dual fuel requirements.

Hot Gas Path:

Latest design improvements for 1st, 2nd, and 3rd stage buckets, nozzles, and shrouds.

Rotor:

Components ranging from bolting to new compressor and turbine discs.

Combustion System Engine Tuning with Monitoring & Diagnostics:

Global support for gas turbine rotating equipment, including remote monitoring.

Rotor Lifetime Extension (LTE):

Our program can prolong rotor lifespan by leveraging advancements in computing, material properties, fracture mechanics, and inspection techniques.

Field Services and Outage Management:

Comprehensive field service solutions, including on-staff bladers and labor provision for gas turbines, steam turbines, and generators worldwide.

Reconditioning:

Global repair capabilities for advanced industrial gas turbines, with facilities in the US, The Netherlands, and The Middle East.

Conversions, Modifications and Upgrades:

We offer solutions to modernize aging equipment, enabling customers to reduce emissions, extend equipment life, and adapt to changing power grid requirements.

Flexible Long-Term Parts and Service Agreements:

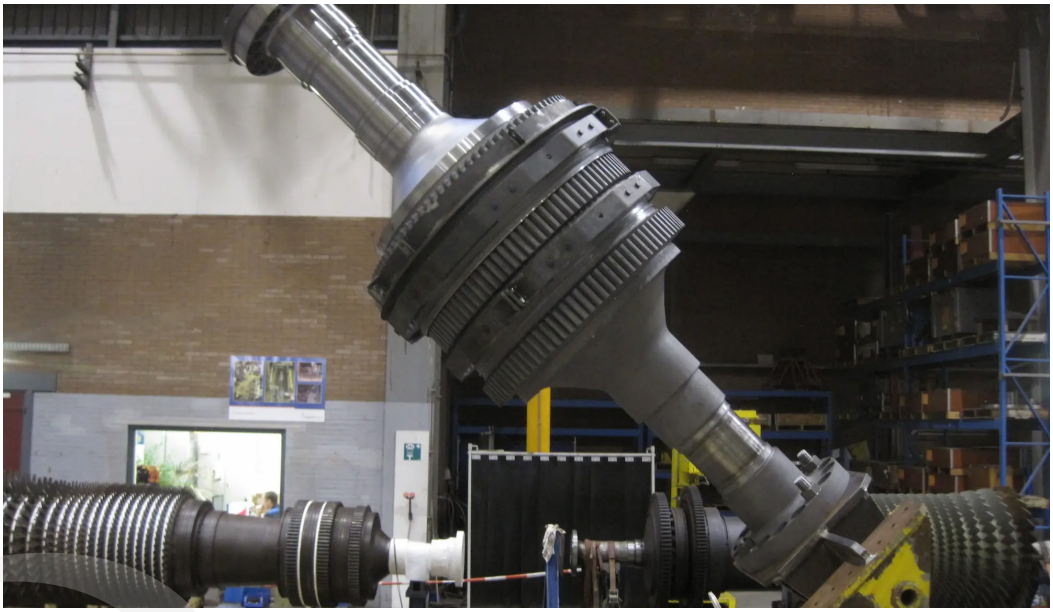
Comprehensive service packages tailored to 6B units, ranging from full LTAs to rotor or component management programs.

PSM - A Hanwha Company

The growing interest in the hydrogen economy is driven by the need to address climate change and transition to sustainable energy sources. However, challenges remain, including high production and storage costs, and extensive infrastructure requirements for distribution and transportation.

As a Hanwha subsidiary, PSM is uniquely positioned to leverage the expertise and resources of the Hanwha family to accelerate hydrogen development and adoption as a clean energy source. Hanwha's global presence and diverse business interests in areas like solar energy and defense provide PSM access to a wide array of technologies, markets, and partnerships.

Collaboration with Hanwha Q CELLS, a leader in large-scale solar projects, enables PSM to integrate hydrogen production with solar energy systems, fostering more sustainable and efficient energy solutions.



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