PSM
a Hanwha company

Innovative Clean Energy Solutions for Future Generations

7B-EA Products and Solutions

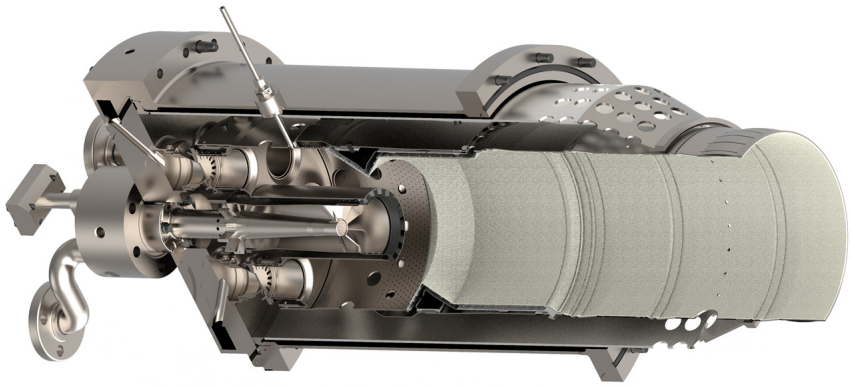
Reliable upgrades to enhance turbine performance and lifespan

PSM's 7B/EA solutions improve efficiency, extend turbine life, enhance reliability, and reduce emissions with advanced upgrades and proven technology.

Full Service Solutions for the 7B-EA Portfolio

Since 2001, PSM has been specializing in the 7B, 7E, and 7EA gas turbines, beginning with our pioneering ultra-low emissions combustion system. Over the years, we have expanded our capabilities to support the entire engine, offering Long Term Agreements, Upgrades, and Modifications.

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.

Combustion

+ Ultra Low Emissions with LEC packages
+ Fuel and Operational Flexibility
+ Digital Enhancements and Automated Tuning
+ 32k Hours / 1200 Starts Intervals

Hot Gas Path

+ Full Suite of HGP New Parts
+ Upgraded PSM Design, Set-wise Compatible with OEM Configuration
+ Upgraded Alloy in S1 Bucket Designed for Peak Performance and Extended Intervals

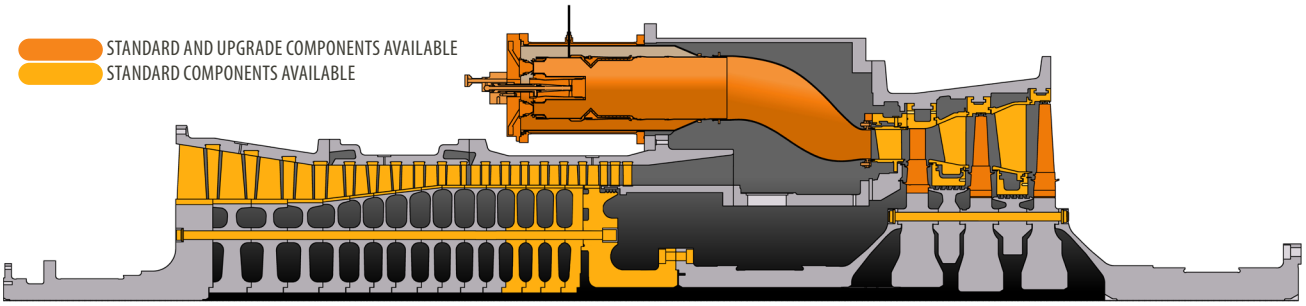
Rotor

+ Unit Rotor Exchanges "Seed Rotor" – Compatible with Unit Configuration
+ Peaking and Baseload Lifetime Extensions (LTE)
  - » Full 3D Finite Element Analysis (FEA) models
  - » Advanced non-destructive inspection techniques
  - » Enhanced repair solutions
  - » New Component Options

Services

+ Field Services including Conversions and Upgrades
+ Global Repair Centers
+ Flexible Long-Term Parts and Service Agreements
+ Combustion System Engine Tuning
+ 24/7 Monitoring and Diagnostics
+ Troubleshooting and Engineering Evaluation Support

7B-EA Standard and Upgrade Options



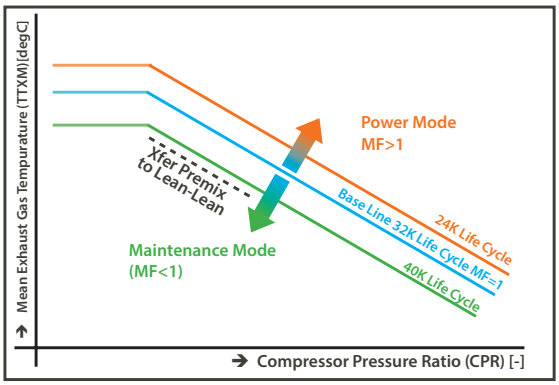
Gas Turbine Optimization Package (GTOP) and Combustion Upgrade Pakage

Since 2011, PSM has been providing performance upgrades with enhanced operability and reduced life-cycle maintenance costs for F-class gas turbine operators. We now extend these offerings to the 7B-EA engine. Given the diverse operational needs of the 7B/E-class fleet, PSM's upgrade packages are specifically tailored to meet each application's requirements. Whether the goal is extending intervals, achieving peak firing, or lowering emissions, PSM has solutions that address both current market demands and future challenges.

PSM offers comprehensive solutions for the 7B-EA Gas Turbine, including combustion, hot gas path, rotor, repair, and service options.

The GTOP package from PSM

+ **Extended component life cycles:** Increase hot gas path inspection interval (HGPI) from 24,000 FH to 32,000 FH while operating in Maintenance Mode.
+ **FlexSuite Flex Counters:** Switch between maintenance and performance modes to fully optimize the gas turbine.
+ **Peak Firing Capability:** Upgraded hot gas path hardware available to handle increased firing temperatures.
+ **Alloy Upgrade of S1 Buckets:** PSM116, PSM's F-class bucket material, allows for increased firing temperatures and longer maintenance intervals.
+ **Enhanced Shrouded S2 Bucket Design:** Addresses common issues in the standard 7EA bucket design, minimizing shingling, creep issues, and increasing efficiency.



GTOP Benefits – The Combined Strength of HGP and Combustor Upgrades

+ **Plant Assessment:** Evaluate the performance impact of the GTOP and flexibility offerings on the entire plant.
+ **Compatibility with OEM Hardware:** Enable a phased implementation of GTOP upgrade packages.
+ **Increased MW Output**: Achieve higher power output.
+ **Extended Turndown:** Achieve turndown as low as sub-35% with IBH and ExB.
+ **Reduced Maintenance Costs:** Lower overall maintenance expenses.
+ **Multiple Combustor Options:** Choose from various combustor configurations.
  - » Flexible fuel operation - 35%+ H_2 blending
  - » <5ppm NOx and CO emissions
  - » <35% extended turndown
  - » FlexSuite and AutoTune with multiple operational modules for engine performance optimization

LEC-III™ and LEC -NextGen Operational Overview

LEC -III™

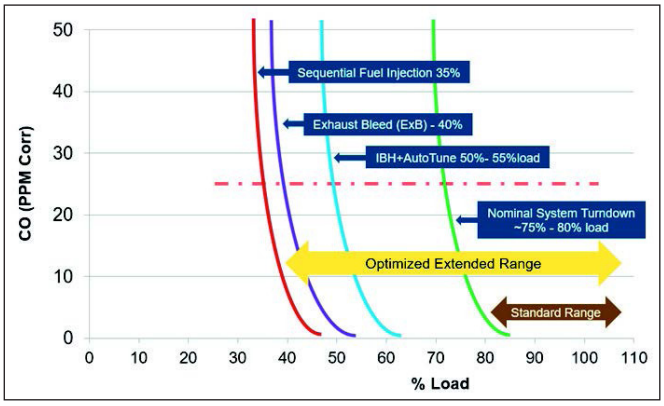
+ Guaranteed emission levels: sub-5ppm NOx
+ Gas-only operation with enhanced fuel flexibility using PSM's SFN
+ Operational capability: 24,000 hours / 900 starts

LEC-NextGen

+ Guaranteed emission levels: sub-7ppm NOx with PSM's SFN (9ppm with DLN SFN)
+ DLN 'drop-in' compatible with gas and dual fuel applications
+ Operational capability: 32,000 hours / 1,200 starts

Addtional Features

+ Turndown with Inlet Blead Heat (IBH) ~50% of baseload
  - » Add Sequential Fuel Injection (SFI) 35% turndown
  - » Add Exhaust Bleed (ExB) for an additional 5-10% turndown to achieve <30% of baseload
+ Reduction in CO_2 emissions due to improved turndown
+ Fuel flexibility: Up to 45% hydrogen while maintaining stable emissions
  - » Additional turndown capability with H_2 mixing
+ AutoTune 3.1 and FlexSuite
  - » Automated tuning for emissions and dynamics
  - » Power+ / Peak+ / Extended Turndown modules specifically developed to extend the operating range
  - » Virtual FlameScanner: Eliminates the need of secondary flame scanner hardware



PSM has developed advanced combustion solutions to meet market needs worldwide. With major environmental concerns making emissions reduction a priority for the entire industry, we have pioneered alternative systems that significantly lower emissions. Our dry low NOx systems have set numerous emission records. Simply installing these systems to replace conventional combustion in turbines can have a substantial impact on reducing CO and NOx levels in the environment. Additionally, these systems offer operational and fuel flexibility to adapt to changing market demands.

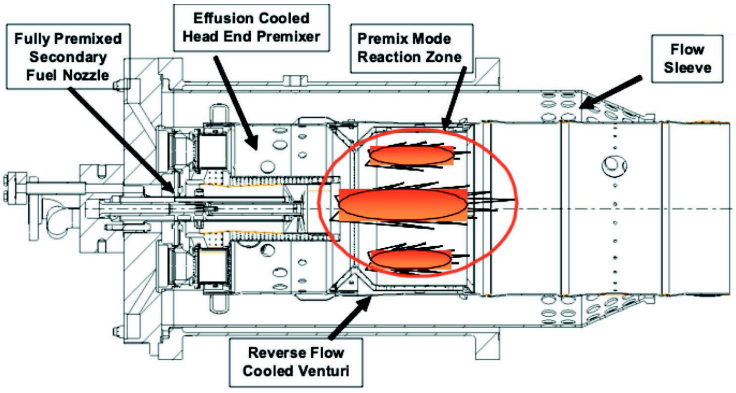
System Differentiations of LEC-III™ and LEC-NextGen

The primary hardware difference between the two systems is the combustion liner. PSM's LEC-III™ system, originally designed for ultra-low emissions, features a unique design with a forward-flowing venturi and effusion cooling technology, making it gas-only. To accommodate dual fuel users, PSM developed the LEC-NextGen system, first released in 2015. The LEC-NextGen system is compatible with PSM's upgraded transition piece, fuel nozzles, and flow sleeves, as well as traditional DLN systems, allowing for greater flexibility.

The LEC-NextGen liner includes upgraded features such as an advanced flowing combustion cap, a thicker lower liner, and enhanced wear characteristics while utilizing a standard flow venturi. This design makes the system more flexible in operation, though it has a slightly higher emissions output compared to the LEC-III™ system, with levels as low as sub-7ppm.

LEC-III™ Combustion Systems - Ultra Low Emisssions

Since 2001, with the introduction of PSM's 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.

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. PSM's 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.

LEC III™ / LEC NextGen Combustion – Flexible Operation

In 2015, PSM introduced the LEC NextGen combustion system. This system utilizes the 'fin mixer' secondary fuel nozzle, transition piece, and flow sleeve of the LEC III™ combustion system by exchanging the combustion liner, combining the best of traditional dry low NOx liner designs with PSM's ultra-low emissions system. This allows for maximum flexibility while achieving up to 32,000 FH / 1,300 FS.

Flexibility

PSM leverages the combustor system to enable flexible operations. Below are options that can be retrofitted on traditional DLN or LEC systems:

+ In 2018, PSM demonstrated the first LEC system to achieve up to 35% H_2 blending
+ Inlet Bleed Heat (IBH)
+ Sequential Fuel Injection (SFI)
+ AutoTune and FlexSuite packages
+ Exhaust Bleed (ExB)

Sequential Fuel Injection: Superior Turndown

PSM's advanced combustion technology, Sequential Fuel Injection (SFI), is designed to meet growing market demand for flexible combustors with extended turndown capabilities. This system is fully compatible with LEC NextGen, LEC III™, and DLN-1 combustion systems equipped with IBH. With the integration of SFI, users can achieve a turndown as low as 35%—an approximate 15% improvement over the baseline provided by IBH alone. Additionally, the system supports emissions-compliant peaking capability, allowing operation up to 10% above the nominal base load (refer to bottom right figure).

The Sequential Fuel Injection (SFI) design philosophy arranges two combustors in series between the compressor and the power turbine. A small, secondary combustor is installed downstream of a larger, primary combustor. For the E-class SFI, a controlled amount of gas is injected at the aft end of the combustion liner, resulting in extended turndown while maintaining acceptable NOx and CO levels without negatively impacting heat rate. Combining SFI with other combustion turndown products such as IBH and ExB allows for sub-35% turndown and reduction in annual CO_2 emissions.

Hydrogen (H_2) – Fuel Flexibility

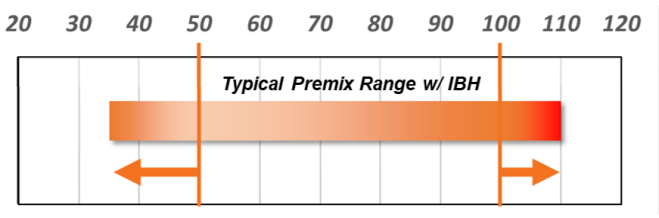
The Future of GT Operation!

Volatile renewable energy has disrupted the energy market as the world looks to reduce its carbon footprint. PSM aligns advancements in combustion technology with environmental goals. We were the first to market with sub-5ppm technology dedicated to E-class units with our LEC combustion technology in 2001 and now offer LEC on seven different multi-OEM B- and E-class platforms. Today, our LEC technology can easily consume up to a 35% H_2 by volume mix with natural gas, without increasing NOx emissions, and has been operational in this application since 2018. Additionally, high-temperature rig testing of this technology platform has proven stable combustion with low NOx and CO emissions up to 45% H_2 by volume mix when combined with Sequential Fuel Injection.

PSM has achieved this with our LEC technology platform, notably our patented secondary fuel nozzle configuration, the "fin mixer." Coupled with our AutoTune and FuelFlex digital technology, designed to handle variable changes in H_2 blending with the natural gas stream, these systems keep emissions and dynamics within desired limits, ensuring minimal mechanical wear and meeting overall environmental requirements.

An added benefit of the LEC technology platform is that the addition of H_2 and natural gas blends improves turndown and operational flexibility. While expanding our LEC capabilities, PSM has also been developing our FlameSheet™ combustor system, pushing the limits of operational and fuel flexibility even further.

Normalized Load - SFI Turndown and Peaking

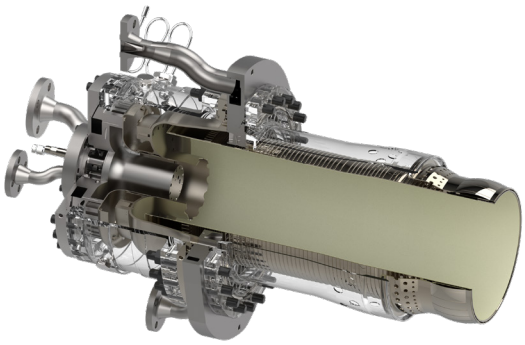


Increase both turndown and top end (peaking_ witin emissions compliance

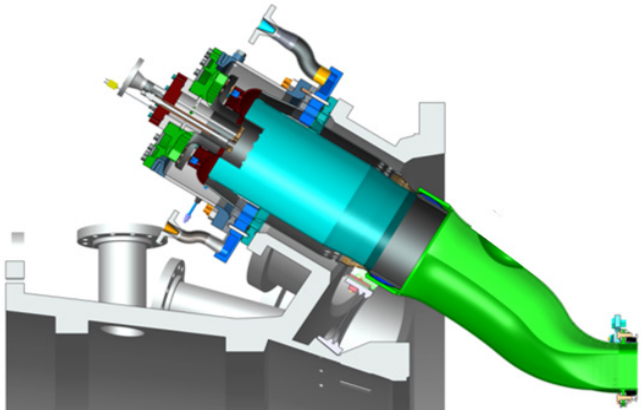
FlameSheet™

Superior Turndown, Fuel Flexibility, and Emissions Capability

Future-Proof your engine today! FlameSheet™ is the ultimate combustor solution to meet new operational needs. As the power generation market faces challenges from renewable energy penetration, low natural gas prices from fracking, and dynamic financial market changes, users must reevaluate their fleets to stay relevant. FlameSheet™ provides unparalleled flexibility, preparing your engine for both current operational demands and the future hydrogen economy.



CROSS SECTION VIEW. FLAMESHEET™ IS NOW AVAILABLE ON MOST ENGINE MODELS



FlameSheet™ Benefits

+ Up to a 30% increase in GT operating load range with single digit NOx and CO
+ Optional low-load HRSG protection setting
+ Superior Fuel Flexibility:
  - » 30% Modified Wobbe Index
  - » Ideally suited for alternate fuel operation, including hydrogen, ethane, and propane
    - + Up to 40-80% Hydrogen blend*
    - + Up to 40% Ethanes (C2)
    - + Up to 10% Butanes (C4-C6)
    - + Up to 20% Propane (C3)
  - » PSM is progressing towards 100% Hydrogen capability!
+ NOx as low as 5ppm
+ Peaking power at constant NOx emissions
+ Dual fuel capable
+ Inspection intervals up to 32K hours / 1,250 starts
+ Compatible with existing GT controllers and fuel skids
+ Turndown as low as 26% (even lower with Exhaust Bleed!)

FlameSheet™ = TWO Combustors in ONE

FlameSheet™ employs a simple, two-stage radially-inflow "combustor-within-a-combustor" concept, allowing staged operation at various load conditions. At high loads, both combustors are used, with the outer combustor flame structure forming an annular "sheet of flame" around the inner combustor. At low loads, the outer combustor is predominantly used. Leveraging trapped vortex stabilization aerodynamics, the outer combustor operates with excellent stability and remains sufficiently hot at very low loads to consume CO (which typically limits low-load operation).the outer combustor operates with excellent stability and remains sufficiently hot at very low loads to consume CO (CO typically limits low load operation).

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 our 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.

FlexSuite – Flexibility Building Blocks

PSM's FlexSuite offers additional controller modules compatible with most control systems and designed to optimize your plant's performance.

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

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.

Hot Gas Path Parts

PSM's product development capabilities rival those of OEMs, using our own design criteria and an industry-proven design analysis toolbox. Our engineering team benefits from access to the global E- and F-class install base, gaining insights into which design features are effective and which are not. Our platform approach to design allows us to leverage our proprietary technology solutions across multiple OEM gas turbine fleets, bringing valuable solutions to users of 7F or 501F and also to 7E operators.

Design Objectives

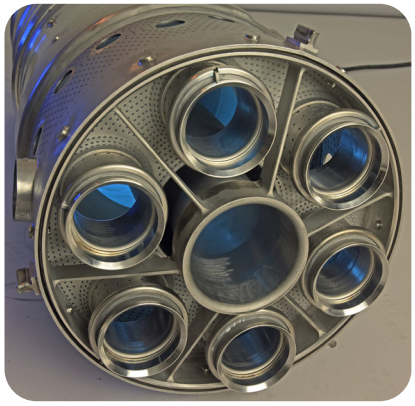
+ Reliability is our primary focus. Once demonstrated, we optimize for operability and life cycle costs. This knowledge is applied to the development of engine upgrades.
+ All HGP components are compatible with the latest 2055F firing temperature machines (Engine Model 7121), and are backward compatible down to and including 7B engines.

Full Suite HGP Components Available: Set-wise Compatible with OEM Design

+ **7E S1 Nozzle:** PSM-adapted design & materials; optional NiCoCrAly & TBC coatings.
+ **7E S2 Nozzle:** PSM-adapted design & materials.
+ **7E S3 Nozzle:** PSM-adapted design & materials.
+ **7E S1 Bucket:** Enhanced cooling through 12 radial stem drilled airfoil cooling holes.
+ **7E S2 Bucket:** Scalloped tip shroud for improved creep resistance; increased tip shroud contact face area mitigates shingling; compatible with and without shroud block honeycomb.
+ **7E S3 Bucket:** Increased tip shroud contact face area mitigates shingling.
+ **7EA S1 Bucket:** Material upgrade to PSM116 from PSM102; proprietary F-class bucket material; enhanced performance for peak firing and/or interval extension.
+ **7EA S2/S3 Bucket:** Scalloped tip shroud for improved creep resistance; increased tip shroud contact face area eliminates shingling; designed to run with and without shroud block honeycomb.
+ **7EA Nozzles:** Advanced cooling configuration; backwards compatible with 7B/E nozzles.
+ **7EA Shroud Blocks: S1:** Cast HR-120 Alloy with Spline seal design, "W" seal option and abradable coating; S2/S3: Latest design with and without honeycomb options.

7EA S1 NOZZLE RING ASSEMBLY

7EA S2 & S3 NOZZLE



7EA COMBUSTION LINER

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.

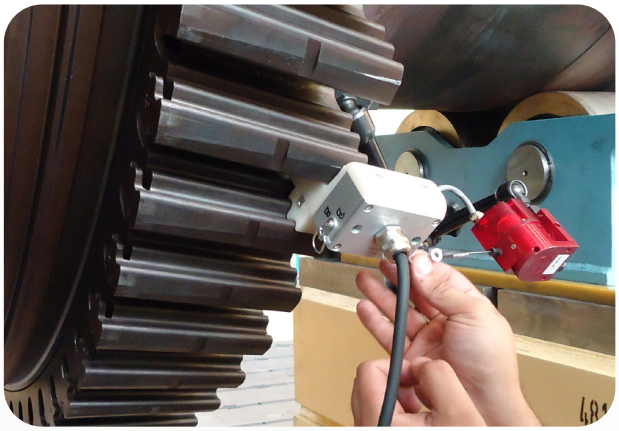
Rotor Management Solutions

Capitalizing on a portfolio of rotor and blading design upgrades and 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

PSM SEED ROTOR INSTALLED WITH NEW ROW 9-17 COMPRESSOR WHEELS



ROTOR BEING TESTED

Rotor Exchange Program – 'Seed' Rotor Program

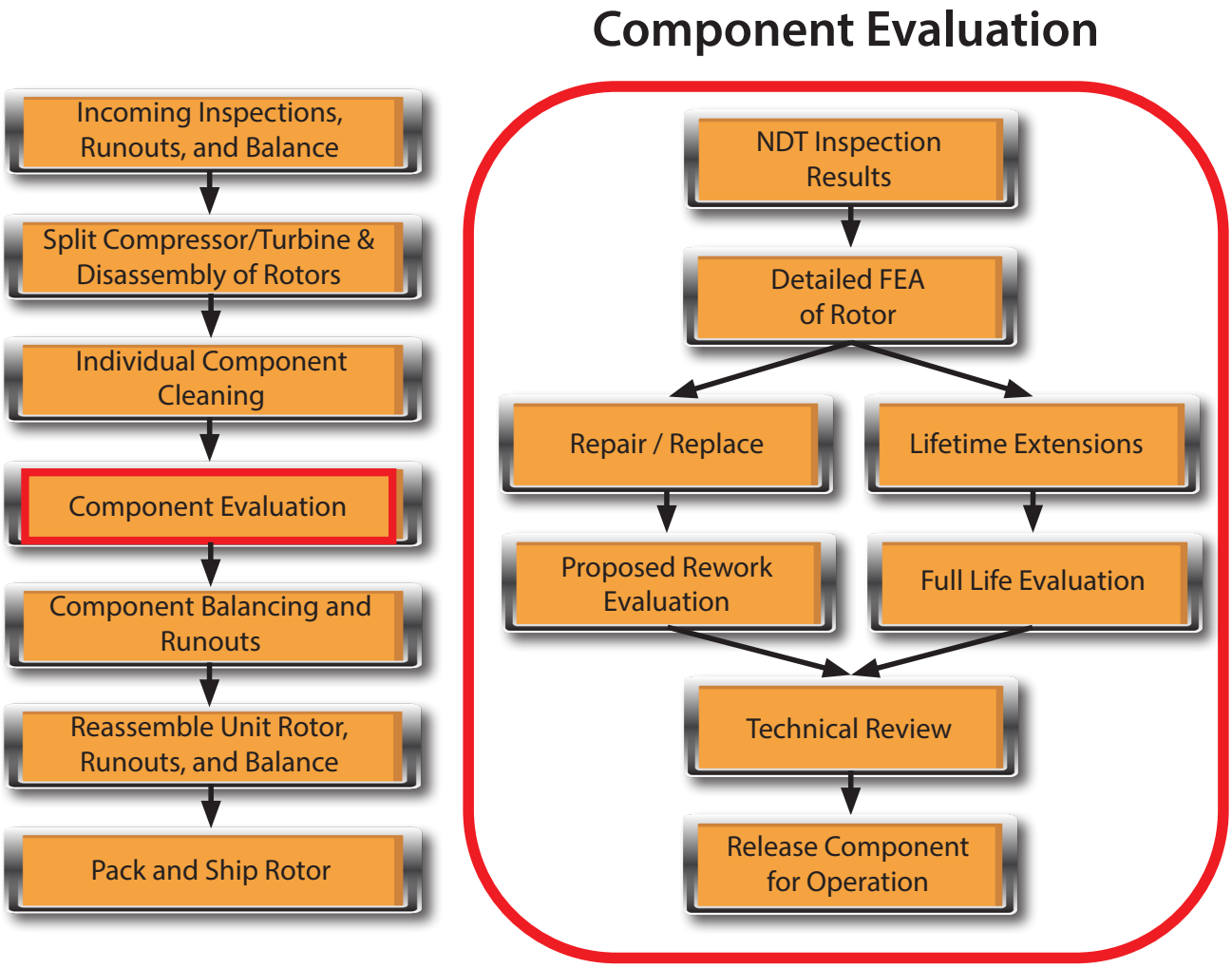
+ Designed to help manage customer's inventory costs and hardware needs.
  - » Allows users to manage outage schedules without unnecessary inventory costs.
+ PSM exchanges the used rotor, regardless of condition, with our 'seed' rotor.
+ PSM is responsible for any replacement parts or repairs the used rotor may need.
+ Full unit rotor available for exchange.
+ Tailored to customer's specific configuration.
+ New bolting, new compressor blades.
+ Optional anti-corrosion coating.
+ Offers 2x intervals of remaining life before the next rotor LTE is needed (baseload or peaking).

TURBINE ROTOR IN STACK

Rotor Lifetime Extension (LTE)

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



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

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 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:

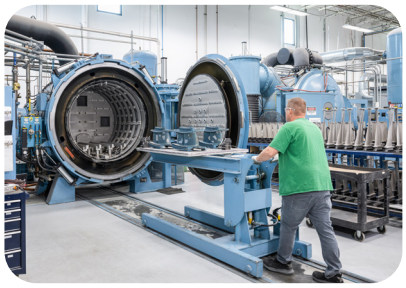
+ OSHA Compliant Safety Program
+ Detailed Outage Planning
+ Customized Tooling
+ Emergency Response Team
+ Control/Combustion Tuning
+ Instrumentation Support
+ Valve Calibration
+ Customized Work Instructions & Quality Plan
+ Foreign Material Exclusion Procedures
+ Field Inspection & Assessments
+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

Repair

PSM, together with Thomassen Energy in the Netherlands, PSM Thomassen Gulf in the UAE, 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

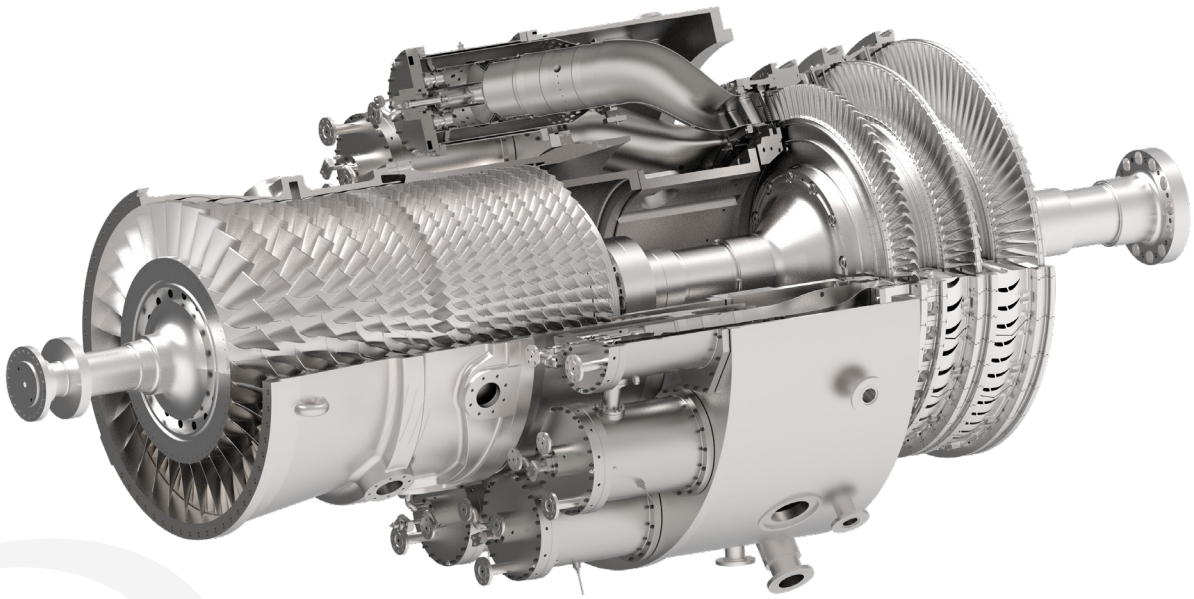
+ Spare & Emergency Parts Warehouse
+ Lifetime assessment of components and rotors

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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Rev. 03/2025