

# Aviation and Aerospace Solutions

Precision Manufacturing & Repair Solutions  
for Aerospace & Aero Derivative Engines

PSM delivers high-quality aerospace components, advanced repairs, and innovative solutions to enhance performance, reliability, and longevity in aviation.

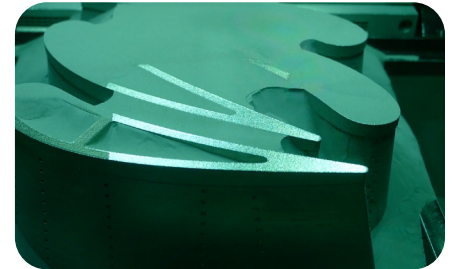
# PSM Aviation and Aerospace

PSM's Aviation and Aerospace division builds on our 25-year legacy of designing, developing, and manufacturing service solutions for high-technology heavy-duty gas turbines in the global power generation industry.

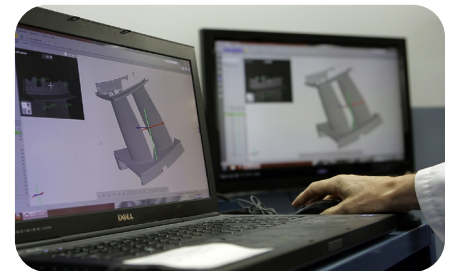
## Engineering Services

With over 150 experienced aviation and aerospace engineers, PSM offers comprehensive engineering services supporting OEM manufacturers, MROs, and the DoD:

- + Turnkey Product Management
- + Reverse Engineering
- + Structured Light Scanning
- + Design Development
- + Manufacturing Support
- + Metallurgical Process Qualifications & Failure Analysis
- + Prototype & Engine Test Hardware Development
- + Additive Manufacturing
- + Comprehensive Analytical Tools
- + Rig Testing



ADDITIVE MANUFACTURING



WORKSHOP ENGINEERING

## New Parts Manufacturing

PSM's dedicated team of manufacturing, process, and quality engineers has been producing cold and hot section components for over two decades, with proven engine validation. We manage the entire development and manufacturing cycle by combining our in-house workshop capability with our extensive global supply chain.

Products include:

- + Compressor Blades and Stators
- + Turbine Blades and Vanes
- + Fuel System Components
- + Advanced Combustion Systems
- + Rotor Components
- + Large Structural Components
- + Legacy and New Engine Platforms

## Cold & Hot Section Repairs

PSM offers a full spectrum of parts reconditioning services to help end users achieve peak performance while minimizing life cycle costs. Our state-of-the-art services extend component life and optimize maintenance budgets.

Services include:

- + Advanced process technologies: Laser welding, Diffusion brazing, Chemical stripping, and APS/HVOF Coating
- + Complete machine shop services: CNC grinding, CNC milling, RAM & Wire EDM, EDM hole drilling
- + Comprehensive on-site NDT and metallurgical services: FPI, Digital X-ray, Scanning Electron Microscopy
- + Metrology: Structured Light Scanning, CMM

## PSM Workshop Capabilities

Our 105,000 sq. ft. Manufacturing and Repair Workshop in Jupiter, FL offers:

- + 3, 4, and 5-axis CNC mills
- + Wire, Plunge, and Fast Hole CNC EDM
- + CNC grinding
- + Large format horizontal boring mill
- + Manual lathes and mills
- + Two Vacuum furnaces
- + Air circulating furnace
- + Brazing services (including honeycomb)
- + Laser cladding and welding
- + TIG, MIG, and resistance welding
- + Three Coating booths – GTV and Two Metco
- + Chemical stripping of MCrAlY Coatings, ultrasonic and hot water wash cleaning
- + Media and bead blast
- + Vibratory finishing
- + NDT: FPI, digital x-ray, eddy current, ultrasonic inspection, airflow, and moment weigh
- + Metallurgical Lab – Comprehensive analysis, failure analysis/fractography, and scanning electron microscopy
- + Metrology Lab – Structured light scanning and CMM



CHEMICAL STRIPPING



LASER WELDING



METROLOGY LAB

## Qualifications

PSM has maintained ISO 9001 certification since 2002 and is currently certified to ISO 9001:2015 by Lloyd's Register. In 2019, PSM achieved AS9100D & BS EN ISO9100:2015 certification through National Quality Assurance Limited (NQA).

PSM also maintains a government Cage Code and ITAR Registration, enabling active bidding on government and military contracts.

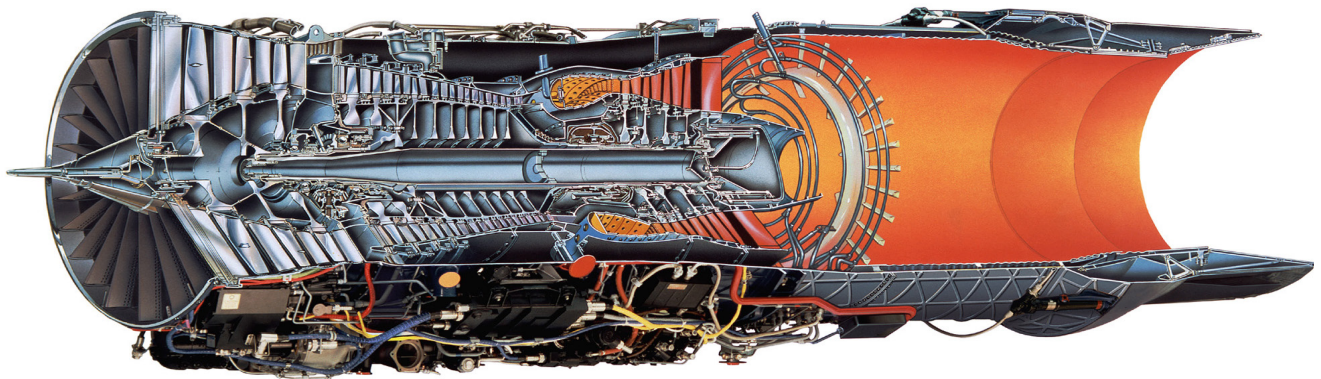


# PSM - A Hanwha Company

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.



**PSM**  
a Hanwha company

**Thomassen Energy**  
a Hanwha company

**PSM**  
Thomassen Gulf  
a Hanwha company

Contact a PSM Sales Representative for additional information.

Phone: +1 561 354 1100

Email: [sales@psm.com](mailto:sales@psm.com)

[www.psm.com](http://www.psm.com) | <https://thomassen.energy> | [www.psm.com/ptg](http://www.psm.com/ptg)