

# AFTERMARKET SERVICES

# for FT8® and FT4000® Gas Turbines

Mitsubishi Power Aero offers a full suite of aftermarket services and products to support your current and developing business needs.



#### **FIELD SERVICES**

Whether performing routine maintenance (i.e., borescope and audits), or more complex in-field repairs, Mitsubishi Power Aero offers a full array of field services designed to minimize downtime. Our field teams, supported by engineering, provide the fastest way to resolve issues with confidence and get equipment back online. When we deliver routine maintenance field services, a useful history of asset condition is developed which helps optimize future planning and service needs. We also offer training courses to maintain and sharpen team skills. Training provides significant value in managing natural turnover and can be a useful tool for site readiness. A small sampling of the most popular maintenance and in-field repair services includes:

- Hot Section Nozzle and Burner Can and Pin Replacements
- Gas Generator Turbine Exhaust Case Replacements
- GG and PT Air Flow / Vacuum Check
- Output Shaft Alignment
- Collector Box Alignment
- · Equipment Inspections / Troubleshooting
- 4.5 Carbon Seal Change-outs
- LPT Nozzle Replacement
- HPT First Vane Replacement
- Inner / Outer Belly Band Replacement

### **SPARE PARTS & COMPONENT REPAIRS**

Mitsubishi Power Aero provides a full array of spare parts and component repair support to maximize plant reliability and availability. We will analyze current spares inventory and supplement as needed to meet operational needs. Forward-looking provisioning can reduce outage time, cost, and provide peace of mind. We also offer a wide variety of OEM-developed and validated component repairs, including:

- Hydraulic Starter Motor
- Servo Valves and Bleed Valves
- Combustion Cans
- Actuators
- Solenoid Valves
- Control System Valves and Cards
- Fuel Nozzles
- Hydraulic Pumps
- Lube Oil Pumps
- Flow Dividers









#### **RETROFITS & UPGRADES**

Mitsubishi Power Aero offers important upgrades and retrofits aimed at improving plant reliability and availability. Whether upgrading plant systems or enhancing operational and economic flexibility, we are here to support your operation. Examples of some important retrofits / upgrades include, but are not limited to:

- Control System / GEN II Upgrades
- Remote Monitoring and Predictive Analytics
- Purge Credit
- Water Injection Pneumatic Valve Retrofit
- Fire System Upgrade
- Black Start / Soft Start
- · Synchronous Condenser Capability
- Fuel Conversions / Additions
- Automatic Voltage Regulator (AVR) Upgrades

Mitsubishi Power Aero retrofit and upgrade services offer true value. These services can substantially improve plant reliability, performance and operator comfort, save costs associated with downtime, and position assets for max utilization in your operating markets.

## **OVERHAUL & REPAIR SERVICES**

Proactively scheduling service and maintenance visits for assets can enhance operational and economic predictability. Our gas turbines are answering the call for fast, flexible power generation worldwide. This is especially critical as the world's energy mix develops and changes. We can help you be proactive, not reactive, and keep plant assets and systems in top condition to avoid sudden, costly downtime.

Mitsubishi Power Aero Aftermarket Services Department offers planning for all asset management needs. Dedicated Customer Service Managers can discuss service and maintenance plans to determine the best fit.



Through flexibility, experience, and focus on exceeding customer expectations, Mitsubishi Power Aero Aftermarket Services offer superior support and a collaborative approach that maximizes your resources.

© 2021 Mitsubishi Power Aero LLC

FT8® and FT4000® are trademarks of Mitsubishi Power Aero LLC

AfS-FS-1021

Mitsubishi Power is a power solutions brand of Mitsubishi Heavy Industries.