

PERFORMANCE SERVICES



Over 400 clients, 90 countries, and more than 30 years in the turbine industry.

Since 1983, TTS has provided innovation, high quality solutions and engineering expertise to clients worldwide.

Our offering to the mature gas turbine market includes:

- Parts supply
- Conversions, modifications and upgrades
- Engineering and on site services
- Power plant services
- Combustion and performance services

We know gas turbines.



DYNAFLEX PERFORMANCE™

TTS' platform that provides operators a wide range of products and services that maximizes gas turbine output and efficiency, optimizes DLN combustor dynamics and emissions, and enhances operational *flexibility*.

Before a DynaFlex solution is proposed, we recommend:

- Our engineers review your needs
- Help establish your goals
- Tailor a solution that specifically addresses:
 - Your unit's operating parameters
 - Plant requirements
 - Business objectives.

All of the DynaFlex services apply to one or more of the following GT models and combustion systems:

- 7FA DLN-2.6
- 6FA DLN-2
- DLN-2.6
- 9FA DLN-2+
- DLN-2.6+
- 7EA / 6B / 5P DLN-1

DYNAFLEX KEY SERVICES & BENEFITS



Key Platform Services	Benefits
Maximizing Base Load Output and Efficiency	<ul style="list-style-type: none"> • Reduced fuel costs • Increases revenue generation • No impact on rated parts life
Improve Load Flexibility	<ul style="list-style-type: none"> • Increase peak capacity (as much as 2.5% above base load for an F-Class and 5% for E-Class) and efficiency • Extend turndown to lower loads (10+% for F-Class)
Fast Start Program Processes	<ul style="list-style-type: none"> • Improve plant start-up processes to capture potential new revenue and cost savings • Implement upgrades for Purge Credit to save 12-15 minutes in start-up times for combined cycle plants and reduce start-up times to base load to 10 minutes for simple cycle E-Class gas turbines • No impact on start-up reliability
DLN-Auto-Tuning for Seasonal and Load Variations	<ul style="list-style-type: none"> • Maintain emissions compliance in response to life cycle degradation, ambient variations, and fuel/Wobbe Index fluctuation • Reduce Lean Blow Out (LBO) trips • Reduce dynamics, extend parts life • Enhanced response timing to changing conditions/demands

DLN PRODUCTS & SERVICES

- Auto-Tuning
- Operational Troubleshooting
- DLN - Tuning, Post-outage or Seasonal (On-site or Remote)
- CDMS (Portable or Permanent)
- DLN Training



OPERATIONAL FLEXIBILITY & PERFORMANCE SERVICES

- Fast Start Program (Any Turbine Model)
- Base Load Performance Optimization
- Load Turndown Optimization
- Peak Fire Operation
- Adjustable Peak Firing
- Cold Weather Optimization



OPERATIONAL FLEXIBILITY & PERFORMANCE SERVICES

- Fogging/Wet System Optimization
- Control Curve Evaluation and Design
- Plant Performance Assessment and Evaluation
- Plant Performance Testing and Consulting
- Life Cycle AGP Upgrade Evaluation 7F .03 to 7F .04
- Correction Curve Development



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