

Engineering Solutions for Aero Engine Maintenance and Repair Engineering and Industrial Services

An aircraft engine requires constant maintenance as it suffers the maximum wear and tear. As you try to keep it in excellent operating condition, Tata Consultancy Services' (TCS) Aero Engine MRO offering comes as a reliable and cost-effective 'advanced repair and life extension solution'. Today, when the industry is undergoing a resource shortage, this offering aims at fulfilling all your high-technology, high-quality, safety-critical and demanding engine engineering needs. From engine repair schemes, unique engine test-bed calibration with test data analysis, to life predictions and documentation – we function as your single partner for comprehensive services.

About Aero Engine MRO

With the industry facing a resource crunch, there is increased pressure on you to meet the growing needs of engine maintenance and repair services. Third party engine MRO centers, Original Equipment Manufacturers (OEMs) and airline MRO units like you will have to perform more MRO services and take up lifecycle support. However, given the spiralling prices of spare parts and their restricted availability, you urgently require cost-effective and high-tech repairs and modifications processes, which will enhance product reliability.

Our Aero Engine MRO brings together an extensive range of Engineering & service offerings under one single roof, to address these and more issues in aircraft engine maintenance and repair. We leverage our varied technology skills and competencies to bring you:

- Cost effective high-tech repair and life extension solutions
- Cost effective repair schemes through component improvement programs
- Reliability studies and high-tech modifications processes

As most of the repair scheme engineering and technical documentation can be done offshore, you benefit greatly from cost advantages. A perfect remedy addressing capacity constraints, our offering makes us a trusted engineering partner for OEMs & MROs to collaborate with.

Why TCS

Having executed numerous engagements in new product development and engine repairs, with major engine OEMs, we have been able to develop mature processes and expertise in technology tools. With the sole aim to provide you with business agility, through scalable and shared services, we ensure you reap benefits from our:

- **Centers of Excellence (CoE).** Our Aero Engine CoE provide solutions across the lifecycle development with maintenance of aero engines. They follow a time-tested design and review process to offer you quality engineering solutions.
- **Domain experience.** Our aero engine domain consulting team and highly-skilled and technically trained engine design professionals, with their years of experience in this area, offer you the best and most reliable solutions.
- **Global presence.** Our presence in major engine MRO geographies like APAC, ME and Ibero America apart from our presence in US and Europe endow us with the required experience and expertise to meet your exact requirements.
- **Unique offerings and high rate of success.** From 'engine test bed calibration' to 'test cell up-gradations' and 'engineering & post design services' to 'life extension programs,' our solutions help us stay ahead of competition, and have ensured the success of our engagements.

Performance and Test Cell Calibration

- Engine test analysis and performance verification
- Engine test cell calibration
- Performance reports and graphs

Engineering and Post Design Support

- Repair schemes
- Design, analysis & optimization
- Reliability analysis
- Certification support

Life Extension Solutions

- Residual life assessment
- Reliability analysis
- Component performance improvement

Manufacturing Engineering & Tooling

- Process planning
- CAM / NC support
- Tool / Fixture design
- Value engineering

Technical Publications

- Maintenance Manuals
- Service Bulletins

About Tata Consultancy Services (TCS)

Tata Consultancy Services is an IT services, business solutions and outsourcing organization that delivers real results to global businesses, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled services delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development.

A part of the Tata Group, India's largest industrial conglomerate, TCS has over 160,000 of the world's best trained IT consultants in 42 countries. The Company generated consolidated revenues of over US \$6.3 billion for fiscal year ended 31 March 2010 and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at www.tcs.com

Benefits

Our domain experts, with the help of high-quality and reliable Aero Engine MRO offerings, have successfully handled high-end aero engine technology engagements. You gain through:

- Development of cost-effective solutions to increase reliability
- Sophisticated life assessment studies to safeguard quality and safety
- Quality engineering solutions
- On-time delivery

Contact us

To know more about Engineering Solutions for Aero Engine Maintenance and Repair contact us at: corporate.engineering@tcs.com

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