

AEROSPACE ENGINEERING

Bringing Better Products to
Market for The World's Leading
Aerospace and Defence
Manufacturers



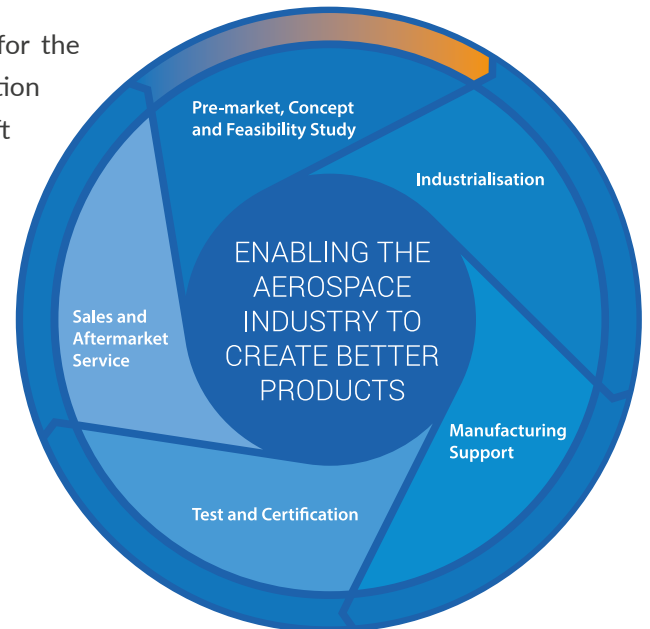
THE GLOBAL **ENGINEERING** PARTNER OF THE AEROSPACE INDUSTRY

Tata Technologies is a global provider of comprehensive services for the aerospace industry. We combine a worldwide network of innovation experts, programme managers and highly skilled engineers for aircraft engineering and design solutions.

As a preferred partner for leading aerospace and defence companies worldwide, Tata Technologies works with a mature global engineering engagement model to deliver fast and optimised solutions across engineering analysis and modelling, continuous engineering support, core product design and development, manufacturing engineering, manufacturing and repair concessions, justification, embedded systems, product lifecycle management and enterprise solutions.

WHY TATA TECHNOLOGIES?

We provide access to the Tata Ecosystem, offering solutions across the entire aerospace and defence value chain. With product development at the heart of our business, we understand the complex requirements facing aerospace manufacturers and can help at all stages of the product development process from concept to flight and beyond to aftermarket services.



OUR KEY SERVICE OFFERINGS

AERO STRUCTURES



- Fuselage
- Wings
- Empennage
- Interiors

AFTER MARKET SERVICES



- Documentation
- Certification
- Logistics
- Quality

DEFENCE



- Land Vehicles
- Naval ships
- Systems Integration
- Concept Design

PRODUCTIVITY IMPROVEMENT



- Simulation
- Digitalisation
- Logistics
- Analytics

LEADING SOLUTIONS FOR AEROSPACE & DEFENCE

■ PRODUCT LIFECYCLE MANAGEMENT

Tata Technologies' Product Lifecycle Management (PLM) services are focused on helping companies build better products, define better processes and reduce costs along the way. We leverage two decades of PLM domain expertise, partnerships with industry-leading software providers, innovative training services and in depth understanding of the challenges specific to each of our aerospace clients.

■ ENTERPRISE IT SOLUTIONS

Tata Technologies' comprehensive Enterprise IT Solutions are designed to enable business transformation for our customers through systematic alignment of ERP, CRM, MES, advanced analytics and collaboration tools. Our offerings cover the entire enterprise lifecycle for an aerospace OEM encompassing implementation, customisation, development, testing and post implementation support.

INDUSTRY CERTIFICATIONS

- ▶ ISO 9001:2008
- ▶ ISO 27001:2005
- ▶ AIRBUS AP2131 CERTIFICATION
- ▶ AS 9100C
- ▶ CEMILAC (TATA HAL TECHNOLOGIES LTD.*)

Our unique value proposition includes the provision of a Certificate of Conformance (CoC) for all the components in a cabin assembly.

Tata HAL Technologies Ltd.: Making Aircraft Engineering Better

* Tata HAL Technologies Ltd. - A strategic JV between Tata Technologies and Hindustan Aeronautics Limited (HAL) - is a Centre of Excellence addressing the entire virtual value chain for Aero structures and related Aero systems.

PRODUCT DEVELOPMENT & DESIGN	ENGINEERING ANALYSIS & MODELLING	MANUFACTURING ENGINEERING	ELECTRONICS & EMBEDDED SOFTWARE	CONTINUOUS ENGINEERING SUPPORT	AFTER MARKET & MRO SERVICES
Conceptual Design Optimisation	CFD- Flow & Thermal Simulation Studies	Robotic Simulations & Off-line Programming	Hardware Design	Engineering Change Incorporation	Repair Concessions Justification
Test Envelope Development	CAD- DMU, Kinematics, Digitalisation, 3D, 2D Installation Drawings	Manufacturing Flow Simulations	Power Electronics	Continuous Product Improvements	Vision for Logistics Management, Quality Assurance and Precision Manufacturing
Test Equipment Design	CAE- Meshing, Linear & Non-Linear, Static & Dynamic Analysis, Optimisation, F&DT	Digital & Physical Manufacturing Expertise	Embedded Software	Engineering Analytics	Development of Repair Schemes
Validation		Tool Design - Jigs & Fixtures		Technical Documentation	Technical Publications
Value Engineering		NC Programming			
Reverse Engineering		3D Plant Layout			

From **Dream** to **Flight** & Beyond...

I want to express my deep satisfaction with the latest Thermodynamic Analysis for our long range fleet carried out by Tata (Technologies). The Tata team showed an outstanding engagement for this task and a level of flexibility and accuracy clearly beyond our expectations. Thanks to this engagement it was possible to meet a very tight deadline for required certification inputs.

- Head of Architecture Performance
(Leading European Aircraft Manufacturing Company)

You guys have been supporting us regardless of all the delays in the program. I know at times it isn't fair on you, however your ability to react quickly to the situation and provide options helps me put pressure back on my customer to deliver.

- Head of Engine Production
(Leading Asia Pacific Aero Engine Company)



ABOUT TATA TECHNOLOGIES

Tata Technologies, founded in 1989, enables ambitious manufacturing companies to design and build better products through engineering services outsourcing and the application of information technology to product development and manufacturing enterprise processes.

With over 8,500 associates, representing 28 nationalities, Tata Technologies focuses on the manufacturing industry - covering every aspect of the value chain from conceptualisation, manufacturing and aftermarket/MRO support. Tata Technologies supports clients through engineering services outsourcing, product development, IT services and product management solutions.

Tata Technologies serves clients in 27 countries, with a delivery model specifically designed for engineering and IT engagements that offers a unique blend of deep, local expertise integrated with fifteen global delivery centres across Europe, North America and Asia Pacific.



8,500+ Employees



3 Regions

Europe, North America, APAC



17 Global Delivery Centres

Detroit - Novi, Detroit - Troy, Chicago (USA), Coventry & Bristol (UK), New Delhi, BlueRidge Pune, Hinjewadi Pune, Bengaluru & Thane (India), Bangkok (Thailand), Brasov, Craiova & Iasi (Romania), Shanghai (China) and Singapore

NORTH AMERICAN HQ

41050 W. Eleven Mile Road
Novi, MI
USA
48375-1302
Tel. +1 248 426 1482

EUROPEAN HQ

European Innovation & Development
Center, Olympus Avenue
Tachbrook Park, Warwick
CV34 6RJ, UK
Tel +44 (0) 8443 759685

ASIA PACIFIC HQ

25 Rajiv Gandhi Infotech Park
Hinjawadi, Pune
India
411057
Tel. +91 20 6652 9090



@TataTech_News



linkedin.com/company/tata-technologies

www.tatatechnologies.com



Engineering a **better world.**