





COMPANY PROFILE

Foundation : 1985

Number of Employees : 3,500 +

Total Area : 505,000 m²

Indoor Area : 156,500 m²

ACTIVITY AREAS

- Parts and Module Manufacturing
- Engine Assembly, Inspection and Test (AIT), Maintenance, Repair and Overhaul (MRO)
- Engine Design and Product Development

ig(PARTNERSHIP STRUCTURE ig)



MISSION

To be a leading OEM that provides services, develops and produces globally competitive, sustainable and indigenous aerospace power systems and their derivatives.

VISION

To achieve globally competitive indigenous power systems.

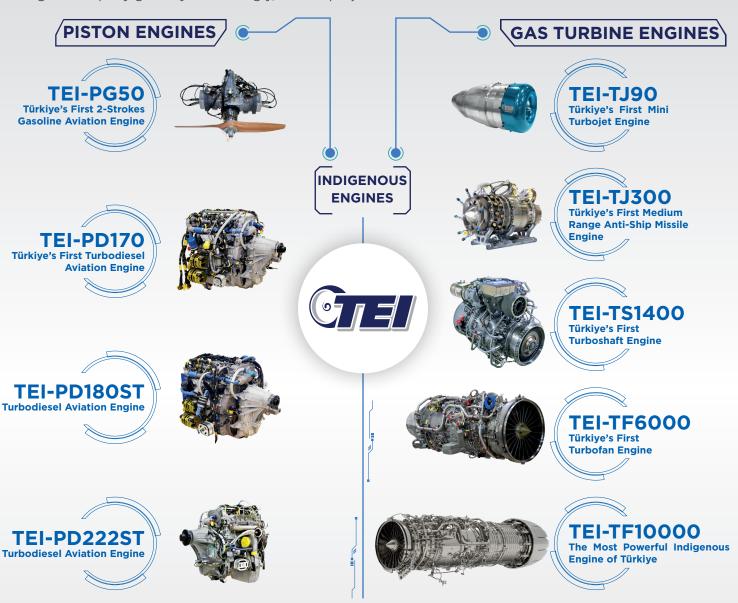
Appreciation and respect, trustworthiness and proactiveness enable us to make best of all to get excellent results.

ENGINE DESIGN AND PRODUCT DEVELOPMENT

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TEI Design Engineering Team is equipped with all design disciplines necessary to design an engine, and then to make it a merchantable product.

In parallel to advanced manufacturing technologies it has, TEI carries out planned activities to accomplish its target of domestically made engine with an indigenous design, in line with its mission of becoming a leading engine company globally. Accordingly, several projects are now carried out.



TECHNOLOGY DEVELOPMENT PROJECTS

In line with the needs of Türkiye, projects are carried out at TEI for the development of high-tech materials and processes used in the production of aviation engines with domestic resources. Within this scope, additive manufacturing, superplastic forming, forging and titanium precision casting processes, Single Crystal and Directional Solidification Blade Casting Technology, Nickel Metal Powder Development for Additive Manufacturing, Development of Additive Manufacturing of Ti Alloys Using Electron Beam Melting, were developed for aviation applications respectively, with the Yakut, Dilek, Örs, İnci, Kristal, Atom and Elektron projects, and the projects were successfully completed.

Ongoing projects; DİNÇ (Aviation Grade Stainless Steel and Nickel Based Superalloy Development), ASLAN (Development of Aluminum Casting Processes for Aviation TEI-PD170 Engine Block)

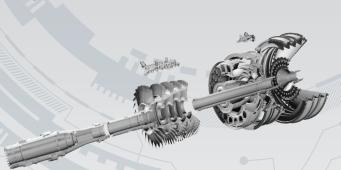


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ENGINE PART AND MODULE MANUFACTURING

TEI, having started its manufacturing activities with 12 parts, currently manufactures approximately 2,000 components for more than 50 different engine programs with its nearly 40 years experience in part and module manufacturing.

- Rotating Parts (Shaft, Seal, etc.)
- Modules (Power Turbine Module, Front Bearing Structure Module, etc.)
- Fabricated Parts (Mixing Duct, Swirl Frame, etc.)
- Structural Parts (Intermediate Casing, HPT Casing, Combustion Casing, etc.)
- Blisk and Spool Manufacturing (Compressor Stg 1 –
 Stg 5 Blisks, HPC Spool Shaft Stg 10 14, etc.)



ADVANCED MANUFACTURING TECHNOLOGIES

Advanced manufacturing technologies, recently being used on new generation engines, are regarded as state of the art and advanced level applications for aviation industry. TEI holds inertia welding and high-speed blade milling capabilities, which are high-tech manufacturing methods currently employed in only a few countries around the world.

TEI has been certificated in accordance with EN/AS9110 standard, which describes the requirements of quality management system for aviation, aerospace and defense organizations. In addition, TEI has Nadcap accreditations for 45 different special processes among 10 different specific services categories.



TEI, which is the largest supplier in the world, has been awarded the Best Supplier Award twice in a row by GE Aviation and SAFRAN Aircraft Engines thanks to its competitive prices, timely delivery to many different parts, and producing with high quality for the most preferred CFM56 and LEAP engine programs with its manufacturing capabilities.



One of every two aircrafts flies with TEI parts.



ENGINE ASSEMBLY AND INSPECTION/TESTING (AIT)

- ▶ High-Tech Assembly Facility
- Turbofan Test Cell Maximum Capacity 100,000 lbs.
 - F110 engines, powering F16 aircraft, in Turkish Air Force Command and Oman Air Force inventory were tested in the Turbofan Test Cell, and testing of TF33 engines of NATO Airborne Warning And Control System (AWACS) are still being carried out in this test cell.
- Turboshaft Engine Test Cells Maximum Capacity of 3,400 shp and 2,500 shp
 T700-TEI-701D engines produced by TEI within the scope of General Purpose Helicopter Project and Makila 1A1 engines powering Cougar helicopters in Turkish Armed Forces inventory are currently being tested in Turboshaft Engine Test Cells.
- ▶ The assembly and testing activities of 236 T700-TEI-701D turboshaft engines are in process to fulfill the engine requirement of 109 general purpose helicopters within the scope of the General Purpose Helicopter Project. Total of 236 engines are planned to be completed and delivered by the end of year 2025.
- Assembly and test activities of more than 300 F110 engines were completed and the engines were delivered to the Turkish Air Force within the scope of Oncel I, Oncel II and Oncel IV projects.
- In addition, the assembly and testing activities of the indigenous engines developed by TEI, are being carried out in TEI facilities.

TEI has been selected "Best Repair Center" by NATO/IAMCO 3 times.

MAINTENANCE, REPAIR, AND OVERHAUL (MRO)

- Depot-Level Maintenance of TF33 engines of NATO AWACS aircraft
- ENSIP/SLEP Maintenance for Bahrain Air Force F16 aircraft F110-100 engines
- Depot-Level Maintenance of Makila 1A1 engines of Cougar Helicopter in the TAF inventory
- ▶ Depot-Level Maintenance and repair activities under EASA Part-145 maintenance organization approval for TP400-D6 engine front bearing structure (FBS) module
- ▶ TEI plans to establish the maintenance, repair, and overhaul capability for the engines of 109 General Purpose Helicopters that will take place in the TAF inventory and with this capability to be gained, the ultimate goal is to provide out maintenance, repair, and overhaul services for the international T700 users in the region.

TEI has the necessary international certifications to be a partner in global competition within the scope of Maintenance, Repair, and Overhaul activities, to provide service in international standards by targeting high quality and sustainability. TEI is certified according to EN/AS9110 standard, where quality management system requirements for aviation maintenance organizations are defined, and is authorized by the European Union Aviation Safety Agency as EASA Part-145 certified maintenance center.





SOURCE OF POWER



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