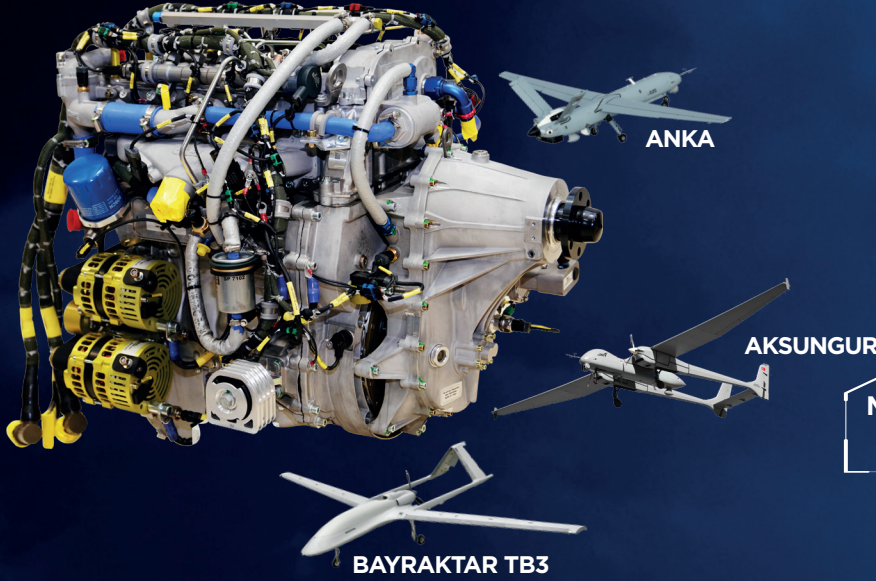


TEI-PD170

PISTON ENGINE



MAIDEN FLIGHT WITH ANKA
27 DECEMBER 2018

MAIDEN FLIGHT WITH AKSUNGUR
04 OCTOBER 2021

MAIDEN FLIGHT WITH BAYRAKTAR TB3
27 OCTOBER 2023

FIRST INDIGENOUS TURBODIESEL AVIATION ENGINE OF TÜRKİYE

TECHNICAL SPECIFICATIONS

› Displacement	: 2.1 L
› Engine Configuration	: Straight 4 Cylinder
› Fuel Supply	: Common Rail Diesel Injection
› Air Induction	: Two-Stage Turbocharging
› Maximum Power	: (@2,300 propeller RPM) 172 HP (±2)
› Dry Weight	: 162 kg
› Engine Cooling	: Water Cooled
› Material	: Aluminium Block and Cylinder Head
› Fuel Options	: JP-8, JET-A1, JP-5, and EN 590
› BSFC (@MSL)	: 207 g/kWh (±3)
› Electrical Power	: 9 kW (2x4.5 kW)
› Altitude Power(@20,000 ft)	: 170 HP
› Altitude Power(@30,000 ft)	: 130 HP
› Altitude Power(@40,000 ft)	: 90 HP
› Critical Altitude	: 20,000+ ft
› Maximum Altitude	: 45,000 ft
› Propeller Control	: ECU Controlled Hydromechanical
› Aircraft Configuration	: Tractor or Pusher Compatible
› Engine Control	: Redundant ECU (FADEC)
› FADEC Software	: DO-178C DAL-C Certifiable
› Alternator Control	: DO-178C DAL-C Certifiable

ADVANTAGES OF THE TEI-PD170

- › High power/weight ratio
- › Superior high altitude capability
- › Less fuel consumption
- › Compact design
- › More than 90% localized
- › 3,600 hours engine lifetime
- › High take-off power
- › High altitude power

FLIGHT RECORD
45 HOURS

ALTITUDE RECORD
40,000+ FT

OTHER HIGHLIGHTS

- › Turbodiesel aviation engine designed for Medium Altitude Long Endurance (MALE) unmanned aerial vehicles
- › Engine is certifiable according to civil aviation engine specifications
- › FADEC is compliant with MIL-STD-461F, MIL-STD-704F, MIL-STD-810G
- › Reconfigurable engine control system software and hardware (developed by TEI)
- › Power increase potential up to 200+ HP
- › Engine is designed and validated according to EASA CS-E