



Kale Jet Engines

ABOUT US

Our company was established in 2013 as a subsidiary of Kale Group, Türkiye's industrial giant, to carry out research and development activities on Turbine Engines.

Kale Jet Engines's main field of activity includes the design, development, testing and production of turbine engines, including but not limited to attritable turbojet engines with compact design, very high thrust-to-weight ratios.

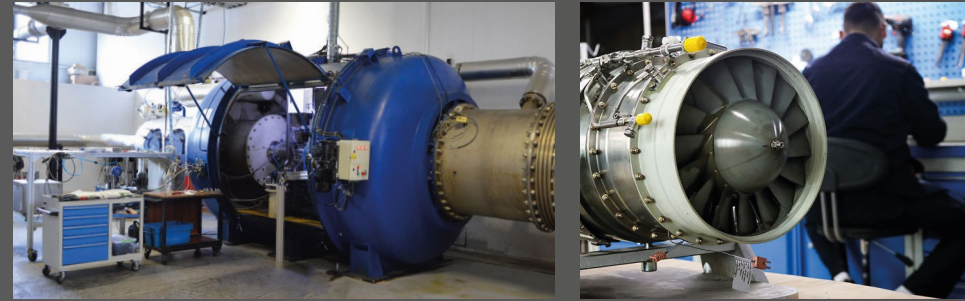
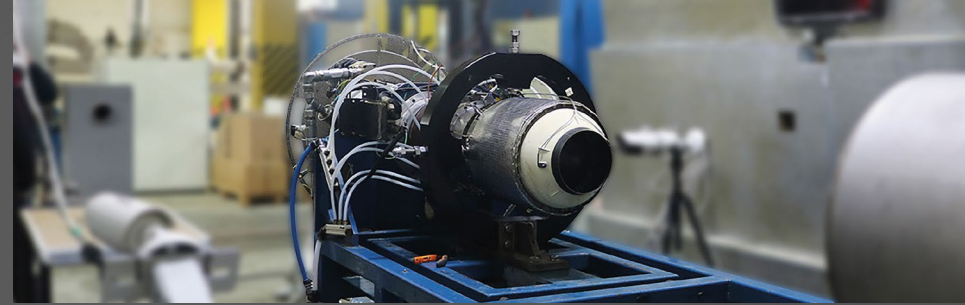
We developed Türkiye's first Turbojet Engine KTJ-3200 and started serial production. We continue to develop and produce new turbine engines KTJ Series Engines in different sizes and features with the experience and knowledge we gained from KTJ-3200 with over 250 employees.

KTJ SERIES ENGINES

FROM THE ROOTS TO THE SKIES

Kale Jet Engines has an in-house Altitude Test Facility for verifying key performance characteristics of its own Turbine Engines at altitude and Mach speed conditions up to 10,000 m altitude level and 0.95 Mach speed.

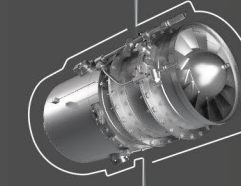
In addition to Türkiye's first and only Altitude Test System, we have Endurance Test Bed, Special Engine Test Systems (including; water ingestion, distortion tests), Combustion Chamber Test Rig, Test Rigs for Control and Accessories, and other test systems.



Our indigenous engines **KTJ-1750**, **KTJ-3200S**, **KTJ-3200A** and **KTJ-3700** do power the NATO-Turkish Armed Forces missile systems – **Çakır**, **SOM**, **Atmaca** and **Kara Atmaca** respectively.

KTJ1750

KTJ-1750 Turbojet Engine

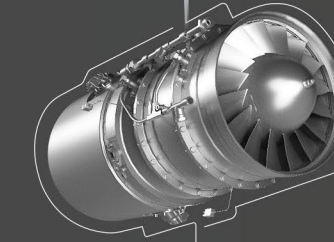


Çakır Missile



KTJ3200

KTJ-3200 Turbojet Engine



SOM Missile

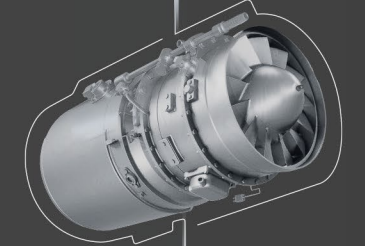


Atmaca Missile



KTJ3700

KTJ-3700 Turbojet Engine



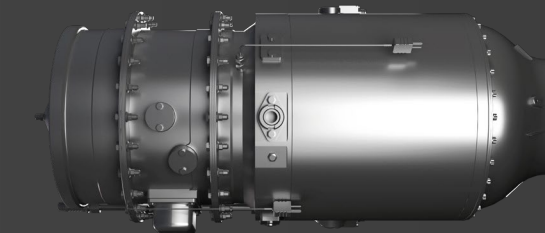
Kara Atmaca Missile



KTJ1750



Length
464 mm

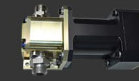


Diameter
202 mm

KTJ-1750



Alternator



Fuel Metering Pump



Electronic Control Unit



Pyrotechnic Igniter



QUALIFIED SLS THRUST
1750 N



SPECIFIC FUEL CONSUMPTION
1.17 kg / h / daN (SLS, lubrication included)



ENGINE WEIGHT
22.5 kg

TECHNICAL PARAMETERS	METRIC	IMPERIAL
Qualified SLS Thrust	1750 N	393.4 lbf
Specific fuel consumption (SLS, lubrication included)	1.17 kg/h/daN	1.15 lb/lbf/h

STARTING RANGE	METRIC	IMPERIAL
Altitude ATF qualified	0 m to 6000 m	0 ft to 19680 ft
Speed ATF qualified	0 to 0.9 Mach	

OPERATING RANGE	METRIC	IMPERIAL
Altitude ATF qualified	0 m to 6000 m	0 ft to 19680 ft
Speed ATF qualified	0 to 0.95 Mach	

PHYSICAL CHARACTERISTICS	METRIC	IMPERIAL
Diameter	202 mm	7.95 in
Total Length	464 mm	18.27 in
Weight (including controls and accessories)	22.5 kg	49.60 lb
Electrical power output	2.3 kVA	
Fuel Type	Jet A-1, JP-8, JP-10	
Lubrication System	Fuel	

In Serial Production

KTJ3200



Length
630 mm



Diameter
330 mm

KTJ-3200



Alternator



Fuel Metering Pump



Electronic Control Unit



Pyrotechnic Igniter



In Serial Production



QUALIFIED SLS THRUST
3200 N



SPECIFIC FUEL CONSUMPTION
1.18 kg / h / daN (SLS, lubrication included)



ENGINE WEIGHT
50 kg

TECHNICAL PARAMETERS	METRIC	IMPERIAL
Qualified SLS Thrust	3200 N	719.4 lbf
Specific fuel consumption (SLS, lubrication included)	1.18 kg/h/daN	1.16 lb/lbf/h

STARTING RANGE	METRIC	IMPERIAL
Altitude ATF qualified	0 m to 6000 m	0 ft to 19680 ft
Speed ATF qualified	0 to 0.9 Mach	

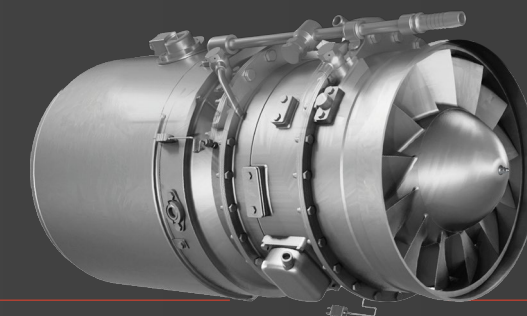
OPERATING RANGE	METRIC	IMPERIAL
Altitude ATF qualified	0 m to 6000 m	0 ft to 19680 ft
Speed ATF qualified	0 to 0.95 Mach	

PHYSICAL CHARACTERISTICS	METRIC	IMPERIAL
Diameter	330 mm	13 in
Total Length	630 mm	24.8 in
Weight (including controls and accessories)	50 kg	110.2 lb
Electrical power output	3 kVA	
Fuel Type	Jet A-1, JP-8, JP-10	
Lubrication System	Fuel	

KTJ3700



Length
630 mm



Diameter
330 mm

KTJ-3700



QUALIFIED SLS THRUST
3700 N



SPECIFIC FUEL CONSUMPTION
1.12 kg / h / daN (SLS, lubrication included)



ENGINE WEIGHT
50 kg



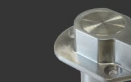
Alternator



Fuel Metering Pump



Electronic Control Unit



Pyrotechnic Igniter

TECHNICAL PARAMETERS	METRIC	IMPERIAL
Qualified SLS Thrust	3700 N	831.8 lbf
Specific fuel consumption (SLS, lubrication included)	1.12 kg/h/daN	1.10 lb/lbf/h

STARTING RANGE	METRIC	IMPERIAL
Altitude ATF qualified	0 m to 6000 m	0 ft to 19680 ft
Speed ATF qualified	0 to 0.9 Mach	

OPERATING RANGE	METRIC	IMPERIAL
Altitude ATF qualified	0 m to 6000 m	0 ft to 19680 ft
Speed ATF qualified	0 to 0.95 Mach	

PHYSICAL CHARACTERISTICS	METRIC	IMPERIAL
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Lubrication System	Fuel	

With the legacy of **Dr.(h.c) İbrahim Bodur** , from the roots to the skies!

Kale Group is one of the larger industrial conglomerates in Turkey. Established in **1957** by one of the pioneering industrialist of Turkey, **Dr. İbrahim Bodur**, Kale has its main business in the field of building materials (one of the largest ceramic tile factories under one roof, in the world) and mining, logistics, along with its technology driven businesses.

Having a vision for growth in technology oriented sectors, Kale Group management established ventures in defense and aerospace sector: creating successful companies including Kale Jet Engines in indigenous turbine turbine engines design, development and production.



OUR VALUES



We Build Trust



We Act With Determination



We Take Responsibility



We Cooperate



We Lead The Way



We Pave The Way For Entrepreneurship



Kale Jet Engines

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