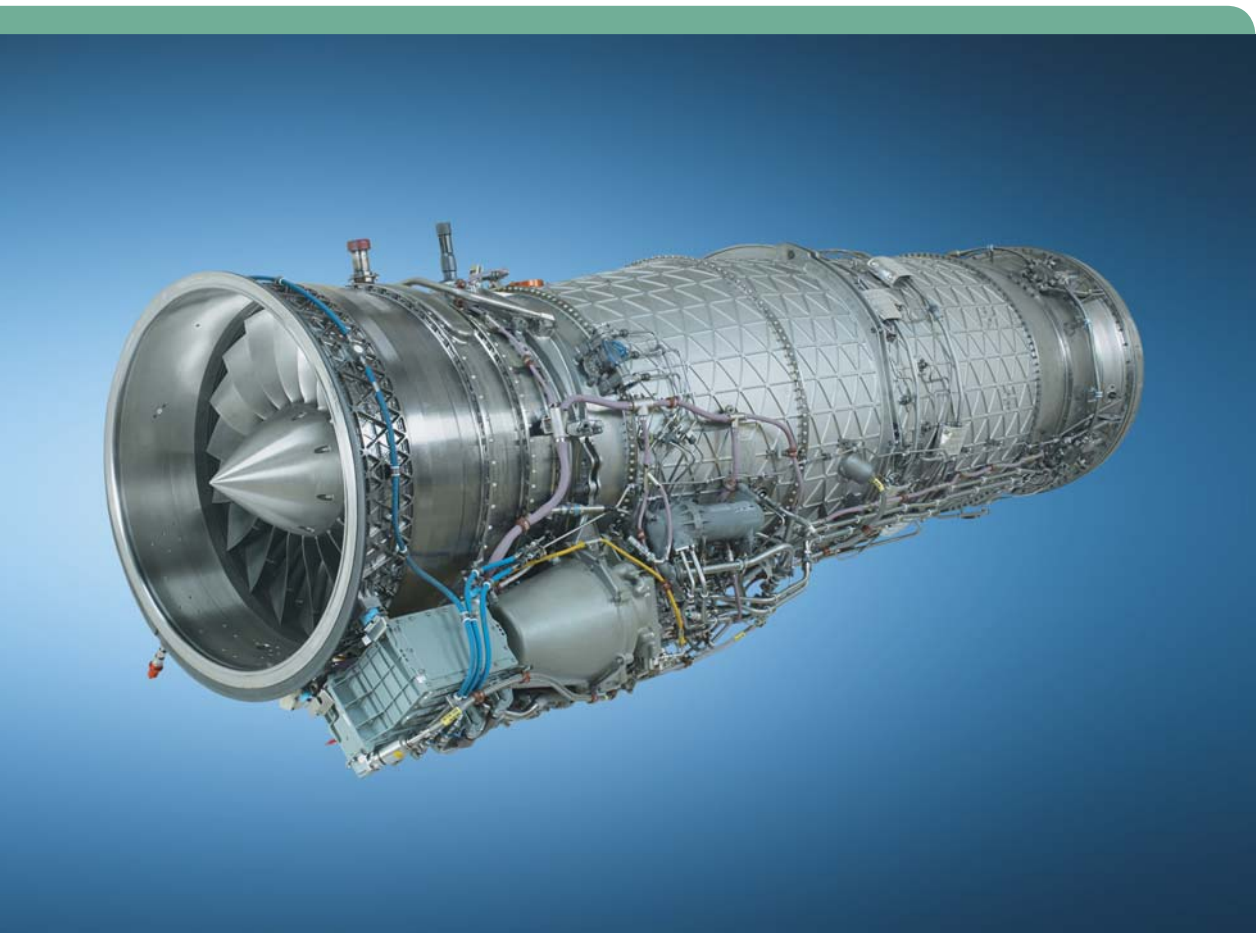
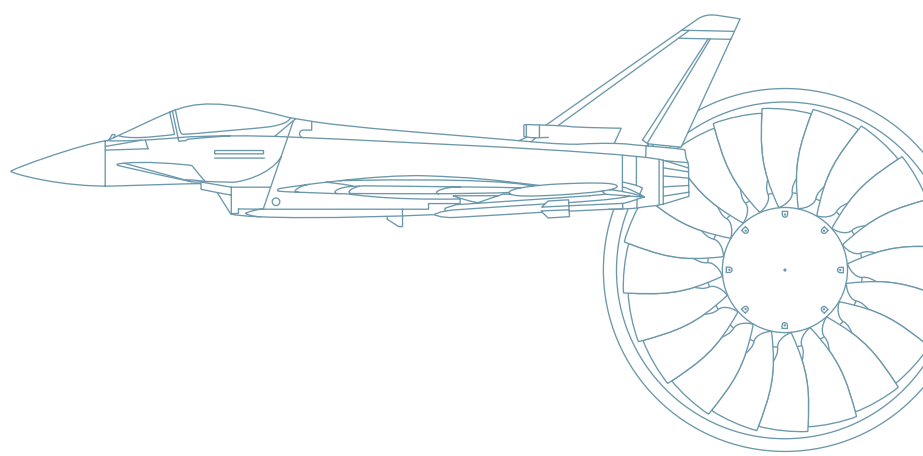
MTU Aero Engines



EJ200 turbofan engine

The innovative power



EJ200 – technology features

The EJ200 is being developed and produced in an international cooperation among Rolls-Royce, Avio, ITP (Industria de Turbo Propulsores) and MTU Aero Engines. The EJ200 has been designed to fulfil the demanding engine requirements set for the next generation of training and fighter aircraft. Equal priority has been given to performance and life cycle costs. The EJ200 engine has been designed for the Eurofighter.

Key features:

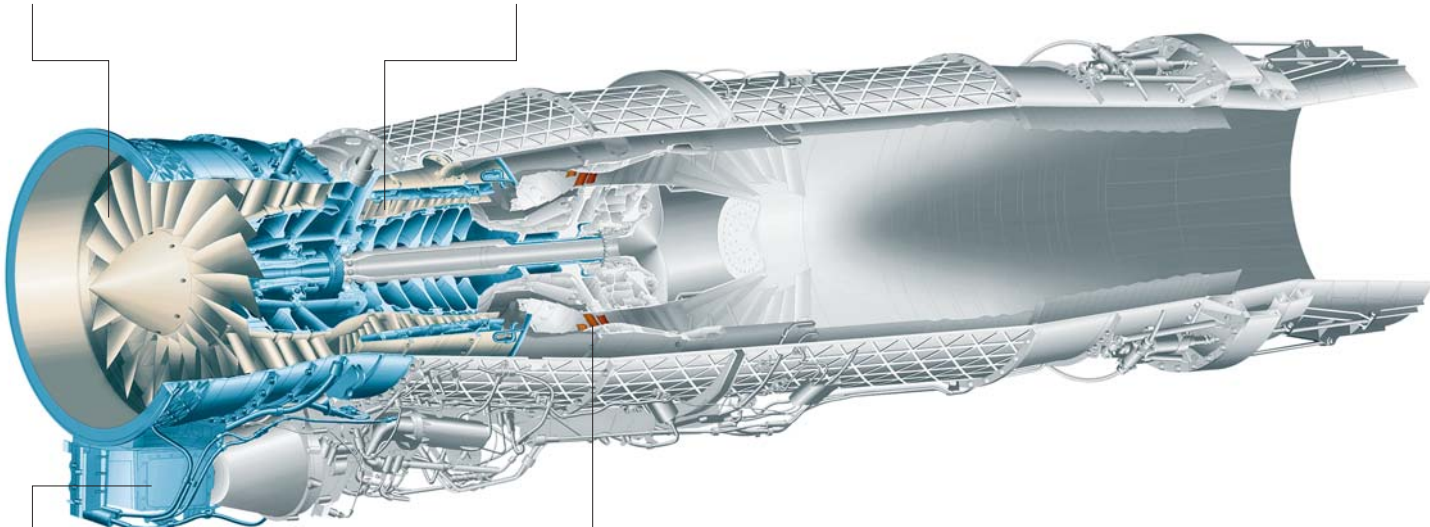
- Unprecedented thrust/weight ratio
- Low fuel burn
- Low cost of ownership
- Modular construction
- Multimission capability
- Significant growth potential
- High tolerance to inlet distortion

Early in 1998 a framework production contract was signed between the EJ200 management company Eurojet Turbo GmbH and NETMA (NATO Eurofighter/Tornado Management Agency) covering the production of 1,382 engines to power the Eurofighter aircraft for the four NETMA nations United Kingdom, Italy, Spain and Germany from 2001 onwards. Orders for EJ200 engines have since been received also from export customers.

High-pressure ratio compressors:

- LP compressor
- 3 stages, all blisk
- No IGVs

- HP compressor
- 5 stages, 3 blisks
- 1 stage VIGV



DECMU:

- Advanced Full Authority Digital Control and Monitoring Unit (FADEC)
- Full carefree handling
- Built-in fault diagnosis/testability
- Built-in engine life monitoring

Blades and vanes:

- Manufactured by MTU in cooperation with Rolls-Royce

The components marked blue are developed and manufactured exclusively by MTU. (share: 30%)

EJ200 engine specifications (uninstalled, ISA, SLS)		
Max. thrust, reheated	90 kN	20,000 lbf
Max. thrust, dry	60 kN	13,000 lbf
Pressure ratio	26:1	26:1
Fan pressure ratio	4.2:1	4.2:1
Bypass ratio	0.4:1	0.4:1
Overall pressure ratio	26:1	26:1
Specific fuel consumption		
Reheated	47–49 g/kNs	1.66–1.73 lb/lbf hr
Dry	21–23 g/kNs	0.74–0.81 lb/lbf hr
Air flow rate	75–77 kg/s	165–170 lb/s
Length (incl. afterburner)	approx. 4,000 mm	approx. 157 in
Max. inlet diameter	700 mm	28 in
Weight (incl. afterburner)	990-1,035 kg	2,183-2,282 lbs

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