

# EJ200 turbofan engine

The innovative power



# EJ200 – technology features

The EJ200 is being developed and produced in an international cooperation among Rolls-Royce, Avio Aero, ITP Aero and MTU Aero Engines. The EJ200 has been designed to fulfil the demanding mission requirements 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.

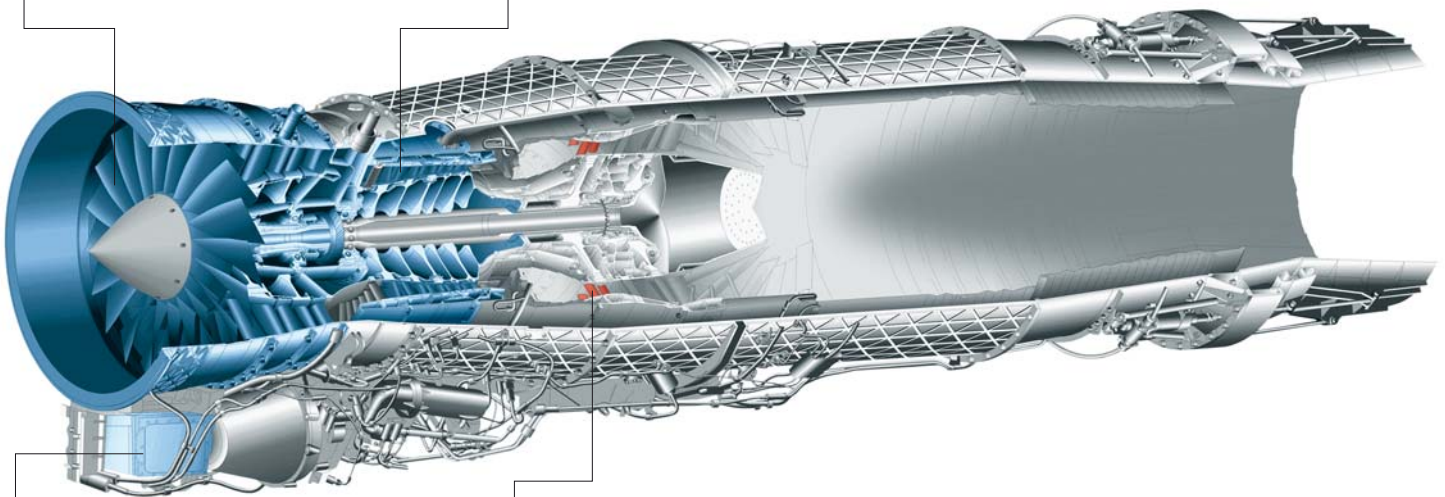
Early in 1998 a framework production contract was signed between the EJ200 management company EUROJET Turbo GmbH and NETMA (NATO Eurofighter/Tornado Management Agency) covering the production of 1,382 engines to power the Eurofighter aircraft for the four NETMA nations United Kingdom, Italy, Spain and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

## 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

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

- HP compressor
- 5 stages, 3 blisks
- 1 stage VIGV (Variable Inlet Guide Vanes)



## DECMU (Digital Engine Control & Monitoring Unit):

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

## Turbine 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	13,500 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
Inlet Diameter	740 mm	29 in
Weight (incl. afterburner)	appr. 1000 kg	appr. 2.200 lbs



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