

M53-P2

MILITARY AIRCRAFT ENGINES





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The M53-P2 engine, the latest version in the M53 family, powers the Mirage 2000 combat aircraft.

This reliable, high-performance engine displays excellent handling characteristics and has proved itself in active combat.

ENGINE FEATURES	M53-P2	
• A/B thrust (lb)	21,400	
• Dry engine thrust (lb)	14,500	
A/B specific fuel consumption (kg/daN.h)	2.10	
Dry engine thrust specific fuel consumption (kg/daN.h)	0.90	
• Air flow rate (kg/s)	94	
• Turbine Inlet Temperature (K)	1 600 (2,420°F)	
Pressure ratio	9.80	
Bypass ratio	0.36	
• Length (in)	199.60	
• Inlet diameter (in)	31.33	
• Weight (lb)	3,340	

The M53-P2 engine powers all the Mirage 2000 fighter aircraft, including the most recent multirole versions Mirage 2000-5 and Mirage 2000-9. Chosen by 9 air forces on 4 continents, the M53-P2 is appreciated by the pilots for its exceptional handling characteristics due to full authority digital engine control (FADEC).

Its extensive flight range – from unrestricted flight at very low speeds up to Mach 2.2 – makes it the ideal engine for modern combat aircraft missions.

Over the last few years, Snecma has introduced new technologies into the M53-P2 in order to reduce the number of engine removals and maintenance costs.

Having logged more than 1,500,000 flight hours, the M53-P2 engine has demonstrated its exceptional dependability and performance in projected force operations.

DESCRIPTION

- Single-shaft, bypass turbofan engine
- 3-stage LP compressor
- 5-stage HP compressor
- Annular combustion chamber
- 2-stage cooled turbine

- Annular A/B chamber
- Variable-section convergent flap-type nozzle
- Full authority digital engine control (FADEC)
- Modular on-condition maintenance (12 modules)