RTM322
Power for the NH90, EH101 and Apache

Rolls-Royce and partner Turbomeca have combined their extensive experience in helicopter gas turbines to produce the RTM322 two-spool turboshaft, which first ran in 1985 and is now in full-scale production.

Designed from the outset to suit a wide-range of military and commercial helicopter designs, the digitally-controlled RTM322 is fully marinised to enable seaborne operations.

The initial production order for the RTM322 to power 44 Royal Navy Merlin HM Mk.1 helicopters was received in 1992 and the type entered service in 1998. The RTM322 also powers the utility variant of the EH101 and the AgustaWestland WAH-64 Apache attack helicopter in service with the UK Army Air Corps. Additionally, the RTM322 was selected as the standard engine for the NH90 during the aircraft qualification and is currently being promoted for future variants of the EH101.

Rolls-Royce Turbomeca has also been awarded a Ministry of Defence (MoD) tri-service support contract covering all three RTM322 applications in UK service.

The engine is also being promoted as a drop-in upgrade for the Sikorsky UH-60 Blackhawk family, offering cost, support and operational benefits. In addition, the RTM322 is the alternative powerplant for the Sikorsky S-92.

- **The Customer's choice for 2,100-3,000shp turboshafts**
- **Selected in 90% of NH90 engine competitions as the powerplant of choice**
- **Nearly 80% of EH101's in service or on order are powered by RTM322**
- **Over 2,200 RTM322's have been ordered or are on option**

Engine Specification

Engine	RTM322 Mk250 (EH101/Apache)	RTM322-01/9 (NH90)	RTM322-01/9A (NH90)
Power shp (kW)	2,270 (1,693)	2,412 (1,799)	2,544 (1,897)
Pressure ratio	14.2	15.0	15.2
Length in (m)	46.1 (1.17)	46.1 (1.17)	46.1 (1.17)
Diameter in (m)	25.5 (0.65)	25.5 (0.65)	25.5 (0.65)
Basic weight lb (Kg)	539 (244)	503 (228)	503 (228)
Compressor	3HP + 1CFHP	3HP + 1CFHP	3HP + 1CFHP
Turbine	2HP, 2PT	2HP, 2PT	2HP, 2PT
Applications include	NHI NH90, Sikorsky SH-60, AgustaWestland EH101 Merlin and WAH-64 Apache		