



Rolls-Royce

Trent

5000

The long-haul profit generator

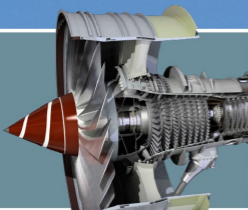
The Trent 500 is the sole power plant for the A340-500 and A340-600 aircraft. It meets all the latest noise and emission requirements with margin, and the fuel efficiency of the engine enables ultra-long haul operation.

delivering excellence



AIRBUS

Airbus A340 family



As the third member of the Trent family,

the engine combines the best proven technology from previous RB211 and Trent engines with reliable operation, leading to competitive engine economics.

The Trent 500 has been designed to suit long-range operations with a high bypass ratio for excellent fuel efficiency and quietness

The Trent 500 has superb environmental credentials meeting or exceeding all current legislation.

The Trent 500 is the first member of the Trent family to have a tiled Phase 5 combustor which requires low amounts of cooling air to achieve efficient emissions performance.



The Trent family's continuous improvement philosophy

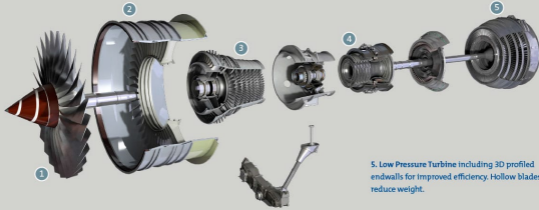
As part of the Trent family's continuous improvement philosophy, the introduction of an enhanced package has improved fuel burn and increased the capability of the engine and the aircraft.



- 1. Lightweight, hollow titanium wide chord fan for low noise and high efficiency.
- 2. Lightweight ribbed 'Armo' containment.

- 3. 8 stage IPC using 3D aerodynamics for efficiency. Reduced VSV count for lower maintenance burden.

- 4. High pressure system comprising an efficient 6 stage HPC, long-life tiled combustor and signal crystal HPT blades with thermal barrier coating allowing reductions in cooling air.



- 5. Low Pressure Turbine including 3D profiled endwalls for improved efficiency. Hollow blades reduce weight.



Trent 500 Technical Data
 Configuration: Three-shaft turbofan
 Thrust: 53,000–56,000 lbf
 Bypass Ratio: 7.5–7.6
 Overall Pressure Ratio: 35:1
 Fan: 26 blades, 97.4" diameter

Intermediate Pressure Compressor: 8 stages
 High Pressure Compressor: 6 stages
 Noise: QC 2 departures/ QC 1 arrivals
 High Pressure Turbine: Single stage
 Intermediate Pressure Turbine: Single stage
 Low Pressure Turbine: 5 stages

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