



Rolls-Royce

Trent 900

Optimised for the Airbus A380 Family



TRENT900

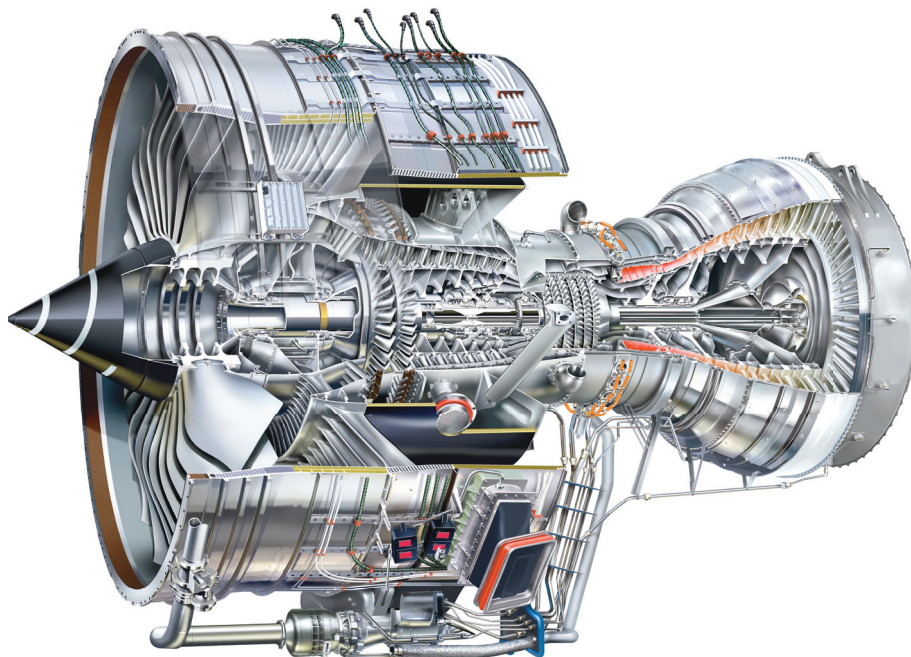
Trent 900

Optimised for the Airbus A380 Family

The Trent 900 builds on the market leading experience of its three-shaft architecture predecessors.

The design benefits from over 30 million hours of Trent® family experience. It is the engine of choice for the A380, having secured two third of operators.

- Selected by 9 out of 14 operators
- Most mature engine, 5 times more flight testing
- Lowest lifetime fuel burn
- Lowest NOx emissions
- Only A380 engine transportable whole in 747F
- Lowest risk solution for the A380



SLS, flat rated to ISA +15°C Thrust 70,000 - 76,500lb (certificated to 80,000lb) Bypass ratio 8.5 - 8.7 Inlet mass flow 2655 - 2745lb/sec

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The Trent 900 is the lead engine on the A380, achieving certification on time in October 2004. It powered the first flight of the A380 in April 2005 and has completed many highly successful route proving flights and tours. The aircraft entered into service with Singapore Airlines in October 2007.

The three-shaft architecture inspired the Trent family evolutionary concept which makes the Trent 900 design simple with excellent performance retention. This unique design also allows the Trent 900 to be transported easily, being the only A380 engine transportable whole in a 747F.

Delivering maturity, the Trent 900 benefits from the most extensive flight test programme on the A380. Four out of five flight test aircraft have allowed the Trent 900 to accumulate the equivalent of five years operation at entry into service.

The Trent 900 is the most environmentally friendly engine on the A380. The swept fan design, combined with careful attention to whole engine design ensures that the Trent 900 meets stringent noise legislation. The tiled combustor reduces emissions, guaranteeing the Trent 900 adheres to all current and proposed environmental legislation.

The Trent 900 is the first engine in the Trent family to feature a contra-rotating high-pressure shaft providing a more efficient engine with lower fuel consumption and reduced weight. In addition, QUICK, an advanced predictive maintenance system, has been introduced to reduce maintenance disruption and improve time on-wing.

The engine has a baseline take-off thrust of 70,000lb and is certificated up to 80,000lb from the same bill of material. In testing, it has been run up to 93,000lb thrust. Performance of the engine is exceptional, meeting or exceeding all of the next generation targets it has been set.



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