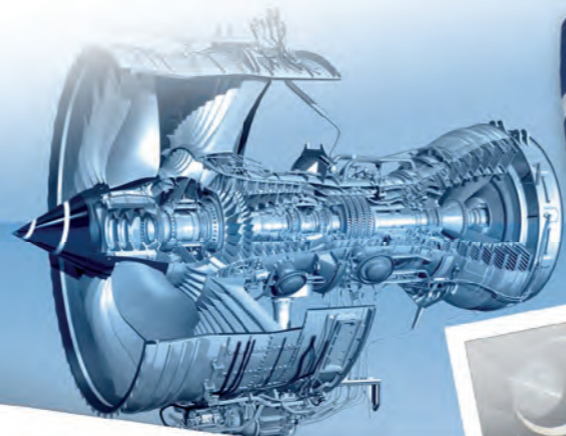
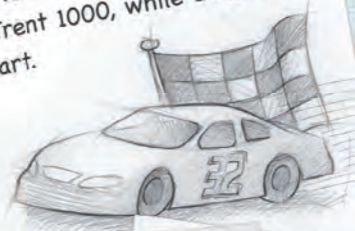


Trent® engine aircraft power



Rolls-Royce

At take-off, each of the Trent high pressure turbine blades produce over 800hp. Equivalent to a Nascar engine! There are 66 of these in each Trent 1000, while a Nascar race only has 43 cars at the start.

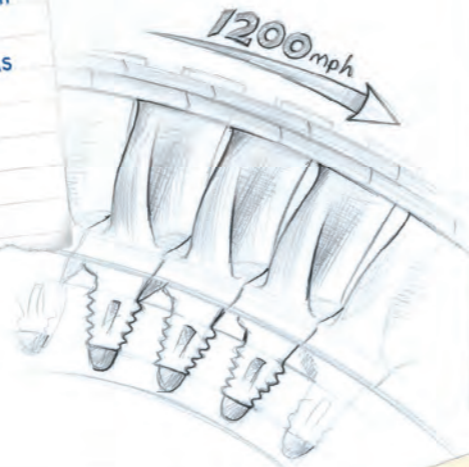


Rolls-Royce is the ONLY aero engine manufacturer that designs both 2 and 3 shaft engines

The unique 3 shaft design used in the Trent family has accumulated over 180 million service hours experience.

The Trent XWB hollow, titanium fan set is almost 10 feet across and sucks in up to 1.25 tonnes of air every second at take-off. By the time the air leaves the nozzle at the back of the engine it has been accelerated to a speed of almost 900 mph.

The blades in the engine's high pressure system rotate at 13,500 rpm, with tip speeds reaching 1200 mph.



A Trent engine has around 30,000 individual components



The Trent 1000 112 inch fan spins at around 2700rpm with tip speeds of over 900 mph, faster than the speed of sound



A Boeing 787 at full power take-off is 3dB quieter than the previous generation aircraft (767) despite being one third heavier. A 3dB noise reduction is equivalent to halving the noise energy.



A Trent engine is expected to fly for 20,000 hours before its first overhaul. This is equivalent to over 11 million miles flown, or 450 times around the world.



4 Trent 800 engines provide enough static thrust to power the space shuttle (4 x 92,000lb)



The highest temperature inside the engine is nearly half as hot as the surface of the sun.



Trent 900 engines mounted on the Airbus A380 first flight, April 2005



Trent 1000 installed on Boeing 787 Dreamliner™ during aircraft rollout, 8 July 2007

Further reading...

Civil Aerospace
<http://rolls-royce.com/civil/>



This is a QR code, a new form of barcode. Use a QR code reading app and phone camera on your 3G mobile device to access more information from the Rolls-Royce website