

CF6-80E1

high-bypass turbofan engines



The CF6-80E1 is the solution for many airlines' daily dilemma: how to move more people farther, cheaper, and with confidence in the reliability of the product. By designing the CF6-80E1 specifically for the Airbus A330, we were able to bring together the newest technology to provide the market with an engine with the lowest weight, lowest fuel burn, and proven stall-free operation. It maximizes the potential of the A330.

The CF6-80E1 is a derivative of the highly successful CF6* family with over 360 million flight hours of operational excellence. While the engine is similar to the CF6-80C2, it incorporates a new 96-inch fan and a 4 stage booster with all-new aerodynamics for an increased pressure ratio. The CF6-80E1 was certified at 67,500 lb thrust in May 1993 and entered revenue service in January 1994. Since its launch, the -80E1 has grown first to 70,000 lb thrust and now to 72,000 lb thrust.

So how did GE engineers and designers make a great engine even better? By incorporating new technologies like a 3D aerodynamic compressor and R88DT high pressure turbine, thereby improving the EGT margin for a greater time-on-wing while reducing the cost of ownership. At 72,000 lb thrust, the CF6-80E1A3 is the highest thrust CF6 engine offered to date.

CF6-80E1 high bypass turbofan

Applications



Airbus Industrie A330/-200/-300



Performance Specifications

Takeoff thrust	67,500-72,000 lb (300-320 kN)
Bypass ratio	5.3
Pressure ratio	32.6
Fan tip diameter	96.2 in (244.3 cm)
Length	164.3 in (417.3 cm)

Milestones

First engine to test, run to 75,000 lb Fn	November-December 1990
First flight, CF6-80E1 flying test bed	February 1992
Engine certification	May 1993
Aircraft certification	October 1993
Entry into service	January 1994
120-minute ETOPS approval	April 1994
First transatlantic service	May 1994
180-minute ETOPS approval	February 1995
CF6-80E1A3 certified	July 2001
CF6-80E1A3 entry into service	December 2001
240-minute ETOPS approval	October 2009

