GENXTM

high bypass turbofan engines



The **GEnx** is the workhorse engine of the 21st century for medium and large-capacity, long-range aircraft, thanks to its tremendous improvements in efficiency and low cost of ownership.

The GEnx is delivering up to 15 percent better specific fuel consumption than the engine it replaces, helping operators save whenever they fly. It's designed to stay on wing 20 percent longer, while using 30 percent fewer parts, helping to keep maintenance costs in check. The GEnx's emissions are up to 95 percent below current regulatory limits, ensuring clean compliance for years to come. It is the quietest, most passenger-friendly commercial engine GE has ever produced.

All of these improvements are thanks to the incorporation of advanced and proven technologies from other engine families and on-going R&D programs. Like lightweight, durable composite materials and specialized coatings. An innovative, clean-burning combustor, a counterrotating architecture. And a fan module that's virtually maintenance-free.

Designed around our customers' needs, the GEnx represents a giant leap forward in propulsion technology.

GENX™ high bypass turbofan engine

Applications



Boeing 787°, -8, -9, -10



Boeing 747-8I, Freighter



GENX General Characteristics	-1870 (B787-8)	-1B74/75 (B787-9)	-1B76 (B787-10)	-2B67 (B747-8)
Takeoff thrust	69,800	74,100	76,100	66,500
Bypass ratio (takeoff / top-of-climb)	9.3 / 8.8	9.1 / 8.6	9.1 / 7.9	8.0/7.4
Overall pressure ratio (takeoff / top-of-climb)	43.8 / 53.3	46.3 / 55.4	47.4 / 58.1	44.7/52.4
Air Mass Flow (takeoff, lbs-mass/sec)	2559	2624	2658	2297
Fan Diameter (in)	111.1"	111.1"	111.1"	104.7"
Base Engine Length (in)*	184.7	184.7	184.7	169.7
Compressor Stages (Fan/Booster/HPC)	1/4/10	1/4/10	1/4/10	1/3/10
Turbine Stages (HP/LP)	2/7	2/7	2/7	2/6
Combustor	SAC/TAPS	SAC/TAPS	SAC/TAPS	SAC/TAPS
Control	FADEC III	FADEC III	FADEC III	FADEC III
Bearings	2B+4R	2B+4R	2B+4R	2B+4R

^{*}Forward flange of forward fan case to the aft outer flange of the turbine rear frame

