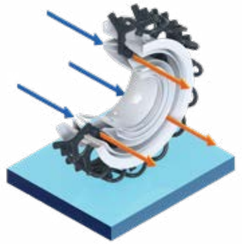
Improved Aerodynamics
The technology and design enable fewer fan blades – 16 in the GE9X engine, as compared to 22 in the GE90 – contributing to the GE9X engine's unprecedented bypass ratio of 10:1, as compared to the GE90's 9:1 bypass ratio. 3D aero design compressor blades also improve aerodynamic efficiency.

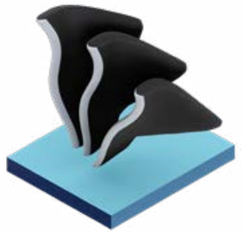
GE9X ENGINE

Born of power and efficiency

The world's largest and most powerful certified commercial aircraft engine, the GE9X is also GE Aerospace's most efficient engine built per pounds of thrust. Incorporating advanced technologies, GE9X is designed to deliver up to 10% greater fuel efficiency than its predecessor, with emissions of nitrogen oxides (NOx) 55% below current regulatory requirements.



TAPS Combustor System
The Twin Annual Pre-mixing Swirler (TAPS) pre-mixes fuel with air prior to combustion, resulting in lower NOx emissions compared to engines with traditional combustors.



Advanced Materials
The GE9X engine contains GE Aerospace's latest generation of carbon-fiber composite, ceramic matrix composite (CMC), and additively manufactured components. Composite and additive parts are lighter than the traditional metal parts they replace. CMCs are also stronger and more heat resistant than their metallic counterparts.

Sustainable Aviation Fuel (SAF)
All GE Aerospace engines, including the GE9X, can operate on approved SAF. SAF is made from partially or completely renewable sources that reduce net CO2 emissions over its life cycle compared to fossil-based fuels.