

Pratt & Whitney

PurePower[®]

Family of Engines

*Delivering Environmental
and Economic Benefits*





EverythingTM

Engine Benefits

PW1000G Engine

16% Leaner

Improves fuel burn up to 16 percent versus today's best engines, from regional jets to mainline single-aisle aircraft. This alone could save airlines nearly \$1,400,000 per aircraft per year.

Tonnes Greener

Carbon emissions reduced by more than 3,500 tonnes per aircraft per year. PurePower engines have successfully been tested with alternative fuel, and will be ready to power aircraft well into the 21st century.

50% Cleaner

Pratt & Whitney's TALON™ X combustor slashes polluting emissions. The PW1000G engine family will surpass the most stringent standards (CAEP/6) by 50 percent for nitrous oxide (NOx).

75% Quieter

Reduces aircraft noise footprints by 50 to 75 percent. Operating 15 to 20dB below today's most stringent standard (ICAO Stage 4) brings a competitive advantage for operators.

\$2,000,000 Lighter

...on your bottom line. That's how much operators could save, per aircraft per year, versus today's best airplanes. The PW1000G engine family addresses the whole picture—fuel, emissions, noise and maintenance—to give you the lowest possible cash operating cost. Savings based on \$3.50 per gallon average fuel price.

PurePower[®]
Family of Engines

The aviation industry has been changed forever... A geared turbofan with far-reaching improvements for the environment and fuel consumption; its fundamentally better architecture and design has elevated how we measure commercial jet engines.

This Changes

DIE-CUT SHAPE →



Engine family highlights:

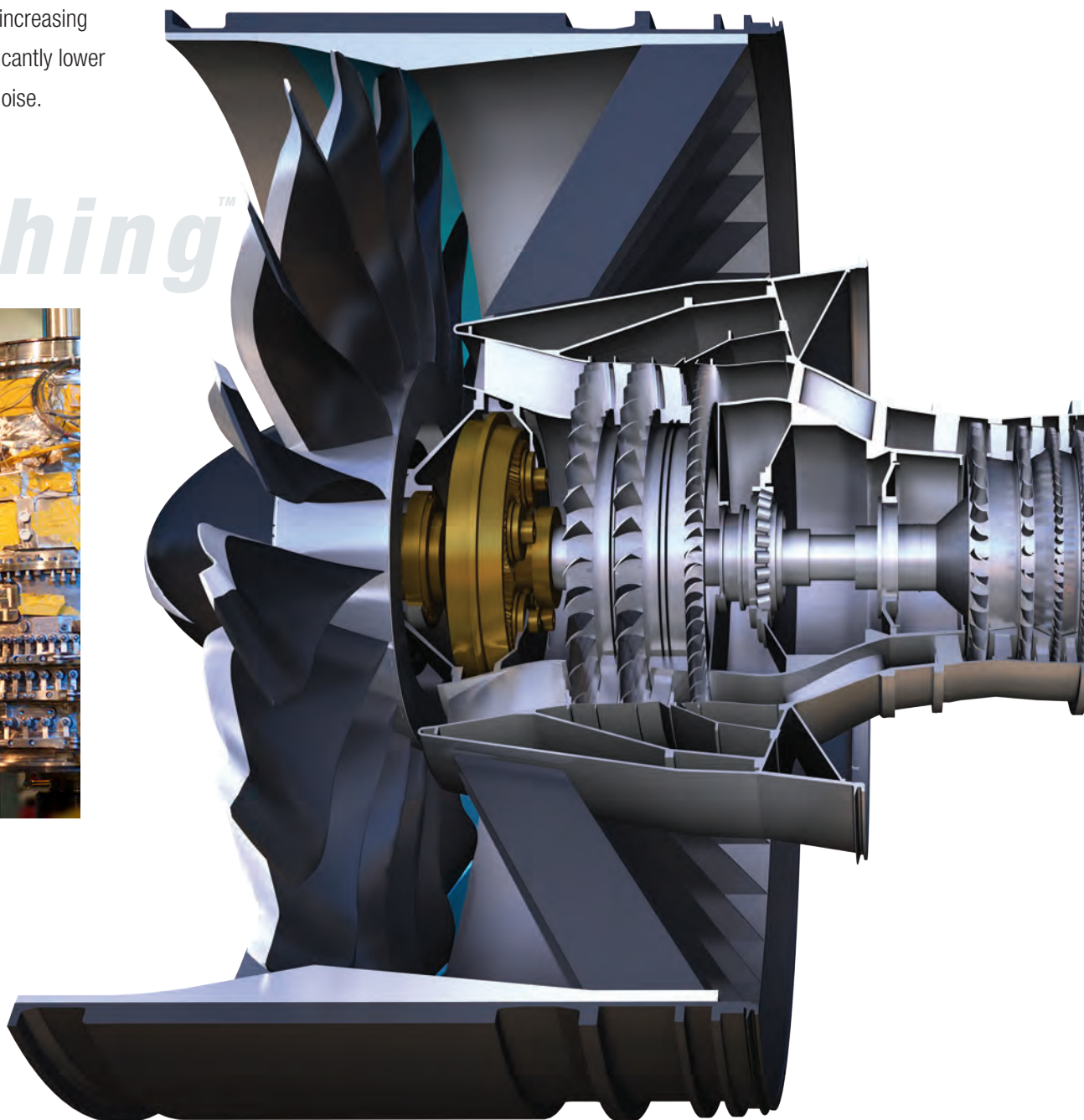
- Five aircraft platforms
- Certified and in-service
- Highest BPR in the industry
- Lighter weight
- Fundamental propulsive efficiency improvements
- Environmental and economic benefits
- Long runway for future improvements and growth

Revolutionary Engine Design

In the PurePower PW1000G engine family, the Fan Drive Gear System allows the engine's fan to operate at slower speeds than the low-pressure compressor and turbine, increasing bypass ratio and resulting in significantly lower fuel consumption, emissions and noise.

Incorporating Advanced Technol

EverythingTM



ologies Throughout

Superior Propulsive Efficiency

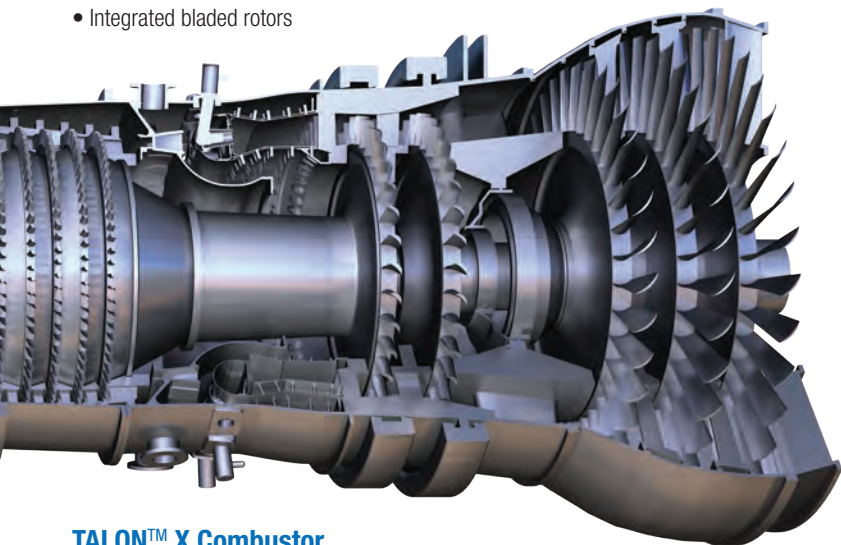
- First ultrahigh-bypass-ratio turbofan engine
- Light-weight, low-pressure fan design
- Composite fan case

Efficient Fan Drive Gear System (FDGS)

- Durable, flight-weight design
- Proven efficiency
- No life-limited parts

Advanced Technology HPC

- Eight-stage design
- Advanced aerodynamics
- Integrated bladed rotors



TALON™ X Combustor

- Reduced NOx emissions
- More than 50% margin to CAEP/6

High-Speed LPC and LPT

- High efficiency
- Reduced LPC and LPT stages
- Reduced part count for maintenance cost savings

High-Efficiency Advanced HPT

- Advanced aerodynamics and cooling
- Proven materials for durability
- Reduced airfoil count



Airbus A320neo



AIRCRAFT A319neo, A320neo, A321neo

THRUST CAPABILITY 24K–33K lbs

ENGINES PW1124G-JM, PW1127G-JM, PW1133G-JM

Mitsubishi Regional Jet



AIRCRAFT MRJ70, MRJ90

THRUST CAPABILITY 13K–17K lbs

ENGINES PW1215G, PW1217G



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PW1000G Engine Family

The PurePower PW1000G engine family combines with next-generation aircraft technologies to deliver even higher environmental benefits, better fuel burn and lower life-cycle costs.

www.purepowerengines.com

Embraer Second Generation E-Jet



AIRCRAFT	E175-E2, E190-E2, E195-E2
THRUST CAPABILITY	up to 23K lbs
ENGINES	PW1700G, PW1900G

Bombardier Cseries



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AIRCRAFT	CS100, CS300
THRUST CAPABILITY	19K–24K lbs
ENGINES	PW1519G, PW1521G, PW1524G, PW1525G

Irkut MC-21



AIRCRAFT	MC-21-200, MC-21-300
THRUST CAPABILITY	28K–31K lbs
ENGINES	PW1428G-JM, PW1431G-JM

FOLD-OUT panel
reveals aircraft

← ———→ DIE-CUT SHAPE



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