OUR JOURNEY
GE Aviation qualified the first additively manufactured part for commercial jet engines. And now, they’ve built a turboprop engine with more than a third of its parts produced additively. But it didn’t stop there – GE Additive was born and we started helping businesses, just like yours, transform how they design and build.

The minds of GE Additive are the same minds that launched GE Aviation’s additive transformation. We are users of additive technology and understand first-hand how this technology can help transform businesses by improving products and manufacturing operations. We have deep domain expertise and we know what it takes to implement this change in your organization.

From defining the business case, to teaching design, to enabling production, to managing qualification, we can help you transform any part, product, process or business.

ADVANTAGES
- Lower costs and simplified supply chains
- Improved product performance
- Faster time to market
- Faster cycle times
Our engineers have decades of experience incorporating additive technologies into the aviation sector. That gives us an unparalleled understanding of this highly regulated industry.
Fuel nozzle tip

**WHY ADDITIVE?:**
- Solving for fuel mixing, fuel emissions and cost savings

**ADDITIVE BENEFITS***:
- 5X more durable
- 20 parts printed as one

**MACHINE:**
Concept Laser M2

**POWDER:**
Cobalt-chrome alloy

*Compared to traditional manufacturing
Low pressure turbine (LTP) blades

WHY ADDITIVE?:
• Reduce weight

ADDITIVE BENEFITS*:
• Hot process allows production of crack-prone materials
• 50% weight reduction

MACHINE:
Arcam EBM A2X

POWDER:
Titanium aluminide (TiAl)

*Compared to traditional manufacturing
T25 Sensor Housing

WHY ADDITIVE?
• Improved precision enabled through complex geometries

ADDITIVE BENEFITS*:
• 30% more precise
• 10 parts printed as one

MACHINE:
Concept Laser M2

POWDER:
Cobalt-chrome alloy

First FAA certified additive part (on the GE90 engine in 2015)
Combustion Mixer

**WHY ADDITIVE?:**
- Reduce part to part variation

**ADDITIVE BENEFITS*:**
- 3X more durable
- 6% lighter

**MACHINE:**
Concept Laser M2

**POWDER:**
Cobalt-chrome alloy

*Compared to traditional manufacturing
**Inducers**

**Cyclonic Inducer**

**WHY ADDITIVE?**:
- Enable reduction of cooling air debris to improve durability
- Complex geometries

**ADDITIVE BENEFITS**:
- 2X more durable
- 13 parts printed as one part

**MACHINE**:
Concept Laser M2

**POWDER**:
Cobalt-chrome alloy

*Compared to traditional manufacturing
Heat Exchanger

Why Additive?

- Smaller, lighter, cheaper, improved durability

Additive Benefits*

- 40% lighter
- 163 traditionally manufactured parts, now additively printed as one part
- 25% less cost to produce

Machine:
Concept Laser M2

Powder:
Aluminum (F357)

*Compared to traditional manufacturing