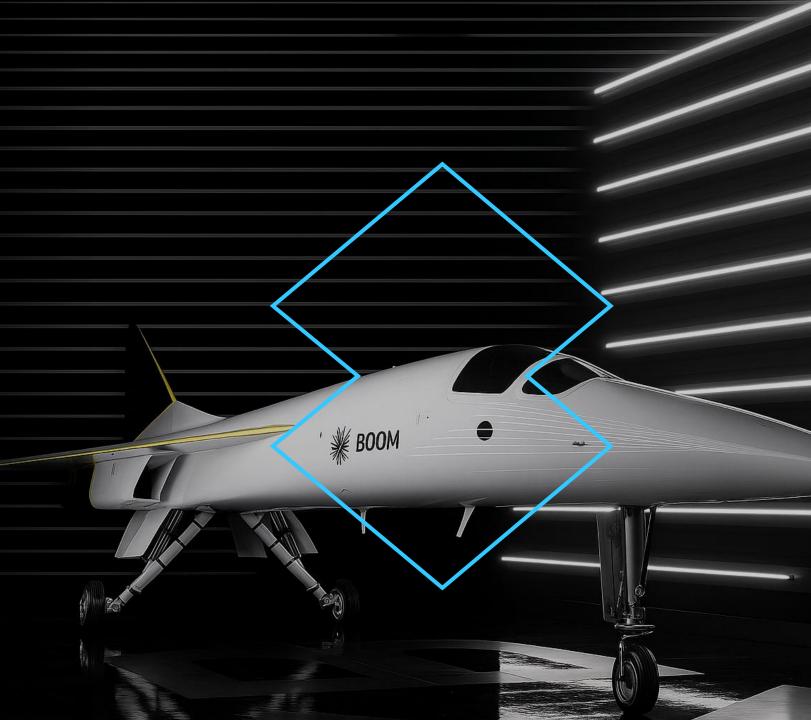


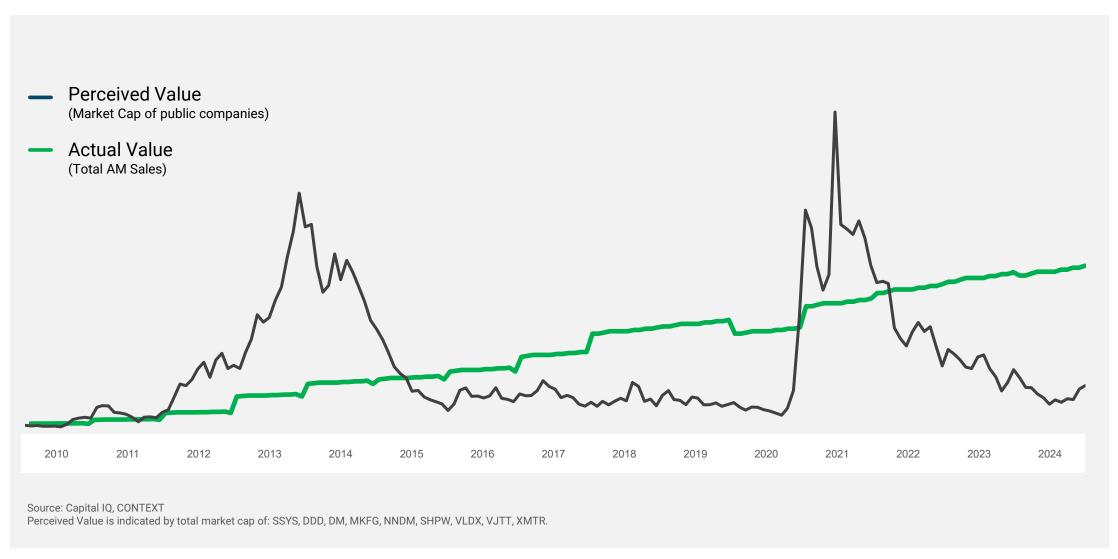
#### ALPHACAM EXPO SEPTEMBER 2025

Andy Langfeld
Chief Revenue Officer (CRO)



#### Additive Manufacturing is Here to Stay

Despite market volatility, AM continues to grow by delivering real, sustainable value









SUPERSONIC

FLIGHT TIME 00:23:00

35,035 FEET

1.10

AIRSPEED 645 KNOTS

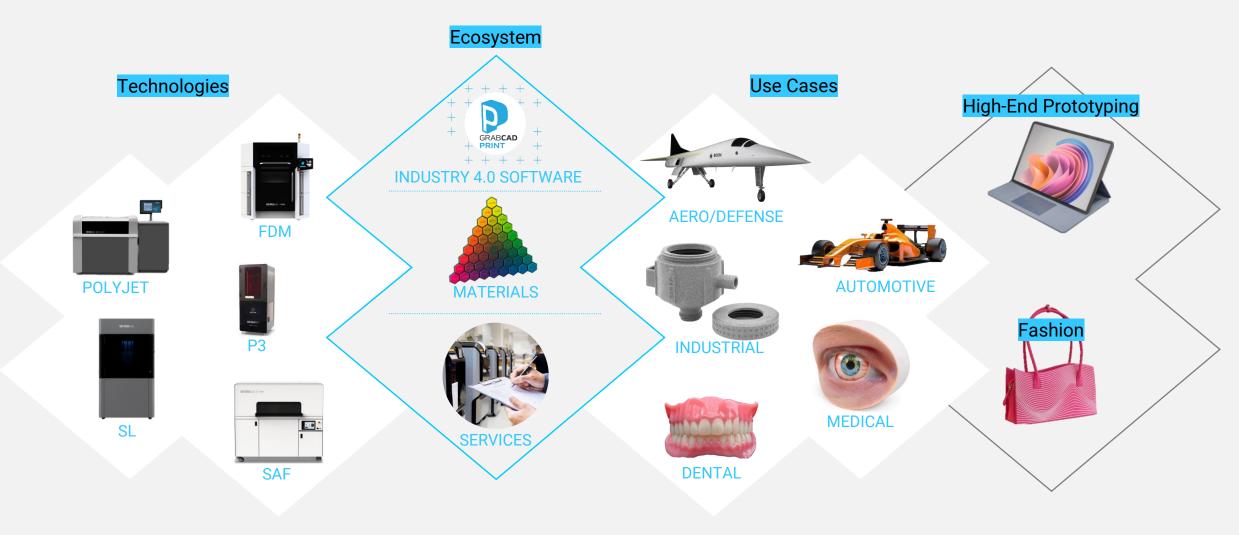
ENGINES LEFT A/B

Т





## End-to-End Solutions – combining 5 technologies and a comprehensive ecosystem to deliver tailored outcomes use-case by use-case



#### We Have 5 Strategic Use Cases... Meeting Highest Requirements

#### **Aerospace & Defense** End Use / Spare Parts

End-to-end solutions including advanced printers, certified aerospace-grade materials and post-processing



#### **Automotive** Tooling

High-precision printers, broad range of materials and software optimized for automotive tooling



### **Industrial**Components

Custom-fit machine parts
- reliable printers
industrial grade,
application-specific
materials, and post
processing



#### **Dental**Dentures

Comprehensive, one of a kind dental solution includes software, biocompatible materials, and PolyJet printers, allowing dental labs to seamlessly produce precise, comfortable dentures with a streamlined digital process

#### **Medical** Anatomical Models

Medical solution combining printers, anatomical-grade materials, and digital workflows to produce lifelike models that support surgical planning, training, and improved patient outcomes



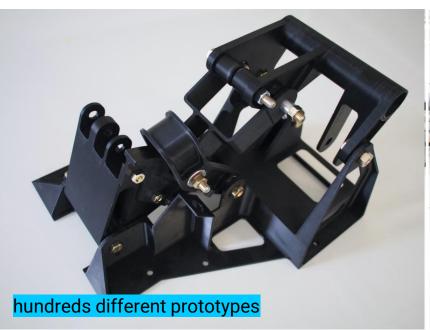
#### **Selection Criteria**

- . Size of opportunity
- 2. Proven success
- 3. Stratasys' unique competitive advantage

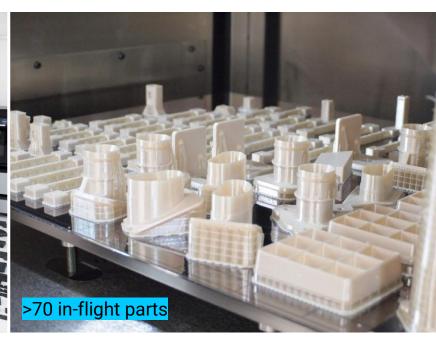


#### **Boom**: From Prototyping to End-Use Parts









**Functional Prototypes** 

**Cost Savings** 

**Tooling Support** 

Time Savings

Flight Hardware

Weight Savings

#### **Boom**: Production Parts for Engine testing

#### Challenges

- Long lead time for fabrication of Bleed Air Duct
- Material waste due to bulk of material being machined away
- Higher material costs

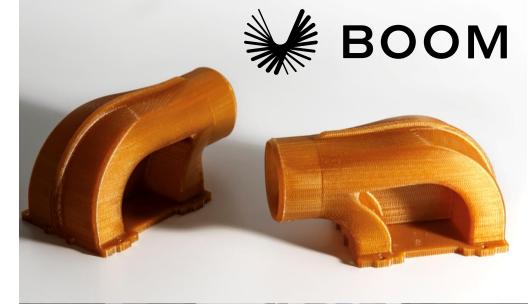
#### Solution

Fortus 450mc™ using ULTEM™ 1010 resin

- •Produced ducts quickly and avoided typical machining backlog queue and machine setup
- •Material cost reduced with AM and used only amounted needed to build part
- •Eliminated design for manufacturability constraints inherent with machining

#### **Impact**

- Fabricate part in 14 hours vs. 7 weeks
- Total cost of per part \$150 vs. \$9,000 using conventional machining
- Total of 98% cost savings & 95% lead time savings

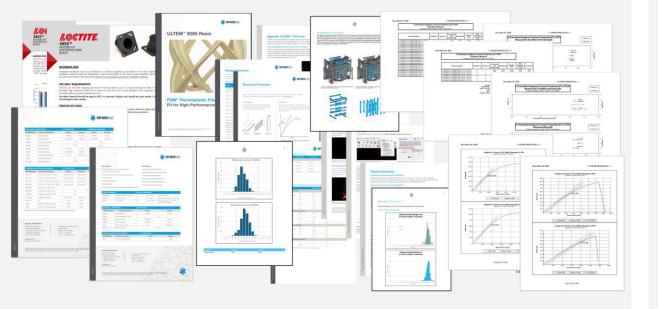




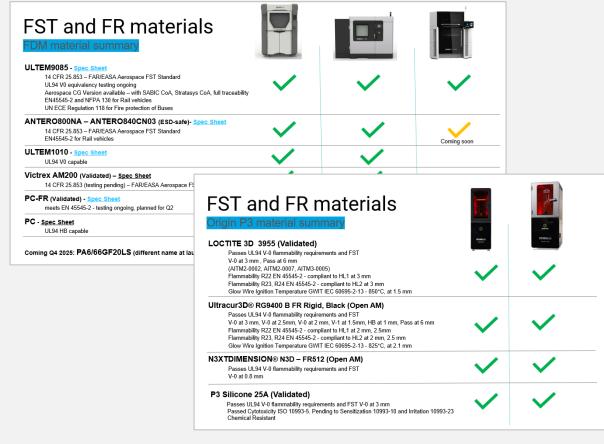
9085,1010 and ULTEM™ are trademarks of SABIC, its affiliates or subsidiarie

#### Certified for Aerospace & Defense

#### Stratasys has thousands of pages of data



#### Aerospace & Defense Related Certified Materials



#### Microsoft: Advanced Rapid Prototyping

#### Challenges

- Need for rapid iteration in hardware development
- Prototypes must match design intent in look & feel
- Traditional methods (CNC, MIM) too slow and costly for fast cycles

#### Solution

Stratasys J850 PolyJet™ for high-resolution, multi-material prototyping

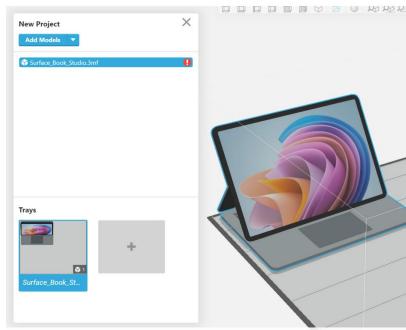
- •Pantone® Validated Colors: seamless color matching with Surface devices
- •High resolution (1600 dpi) enables fine details, logos, and textures directly in the print
- •Integration with GrabCAD Print for advanced color, opacity, and transparency effects

#### **Impact**

- Next-day prototypes accelerate decision-making
- More iterations per cycle: faster innovation
- High-fidelity models enable a premium Surface user experience







#### **General Motors:** Hemming Tool for Chevrolet Equinox

# <u>gm</u>

#### Challenges

 Rear wheelhouse hemming tool traditionally machined from aluminum with a >10-week lead time, inflexible for changes

 Heavy tooling (~34 kg) requiring lift assistance; risk of damaging sheet metal during positioning

#### Solution

F900™ printer using FDM ASA thermoplastic material

- Lightweight lattice design to cut tool weight
- Digital workflow with CAD-to-print for faster iterations
- On-demand production of replacement or modified tools

#### **I**mpact

- Lead time reduced by ~70% (from 10–13 weeks to 3 weeks)
- Weight reduced by  $\sim 56\%$  from 34 kg to 15 kg  $\rightarrow$  easier, safer handling
- ~74% cost savings compared to aluminum tool
- Greater agility for future vehicle programs



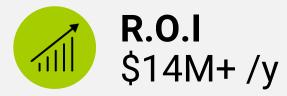
#### **General Motors:** Tooling Overview

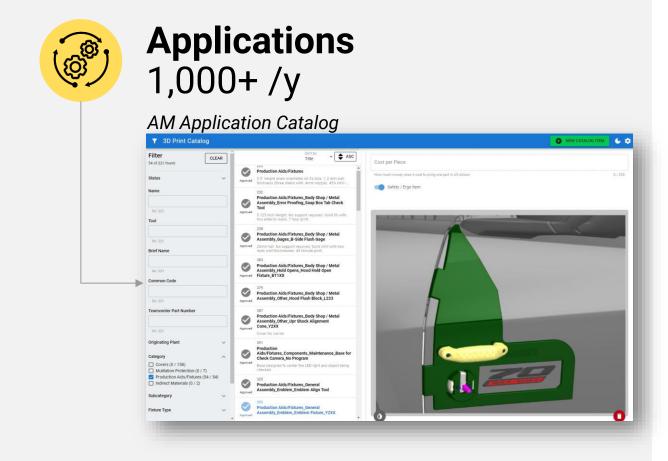




# **Deployment** 40+ F900







#### PRINTING THE FUTURE, SAFELY



At Boom,

Additive Manufacturing isn't just

a tool. It's a mindset.

Source: https://boomsupersonic.com/flyby/turning-powder-into-power-how-boom-is-using-3d-printing-to-accelerate-symphony-engine-testing





Dankeschön

