ENGINEERING
TOMORROW

Internship Presentation – Additive Design & Manufacturing (2026)

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Key Metrics

Production

Orders Completed	Parts Manufactured	cm^3 Printed
950+	11,000+	1,580,000

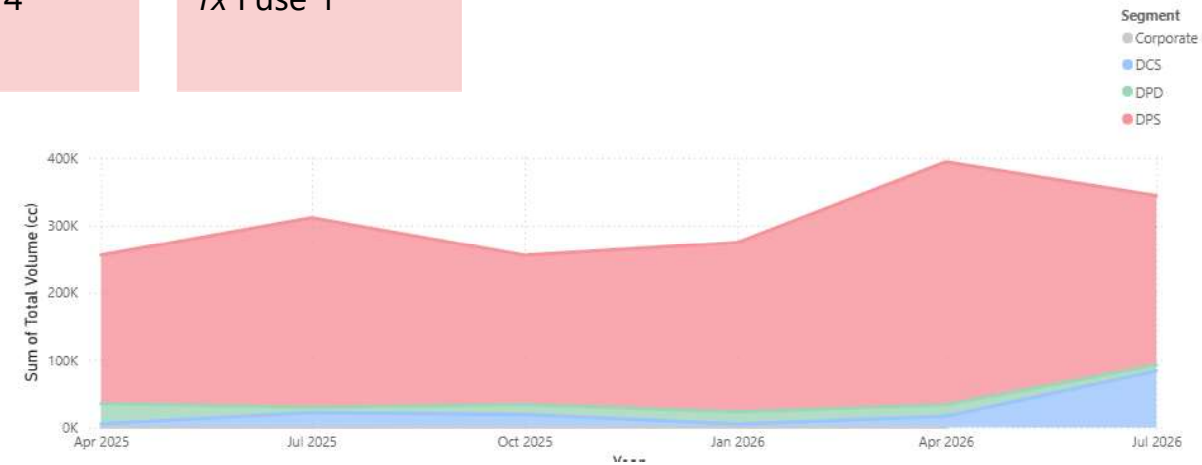
When cm^3 printed is converted into filament, it is enough to go from Ames IA to St. Louis MO

Total Equipment

FDM	FDM Industrial	SLA	SLS
-*9x* Prusa XL's -*1x* MK4	-*1x* MF X7 -1x MF Metal X	*1x* Form 4	*1x* Fuse 1

Misc. Metrics

Projects Completed	Materials Utilized
20+	25+

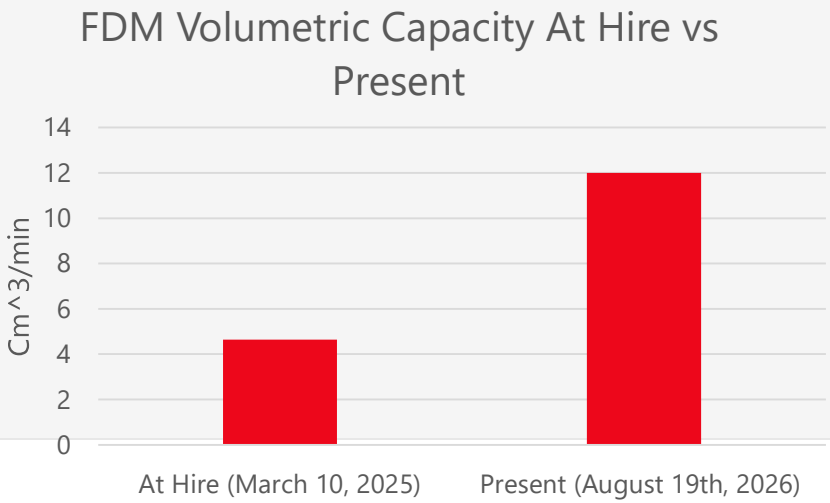


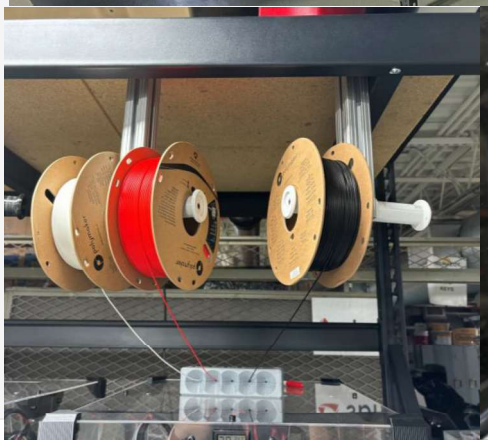
Growth of the Ames ADM Lab

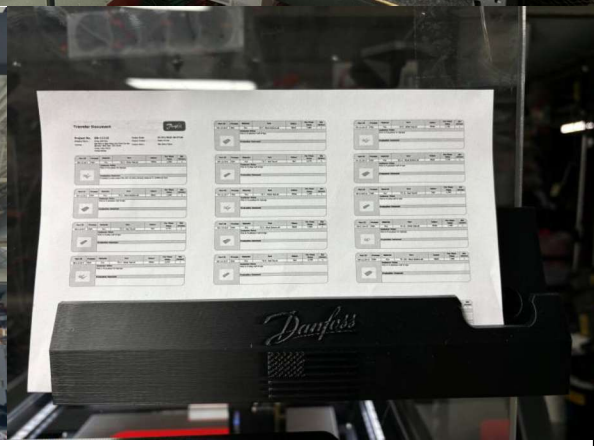
When I Started
- 1 Prusa XL
- Several Prusa MK3s
- Longer turnaround times

Today
- 9 Prusa XLs
- Reduced lead times
- Increased manufacturing capacity

Contributions
- Production support
- Printer maintenance
- Process improvements
- Machine installations







Project Spotlight

Mixing Ball Redesign

Challenge

A consumable component was being sourced from an external supplier for the Ames paint line.

Solution

- Designed in-house replacement
- Performed material and machine selection
- Conducted testing and validation to find viable options

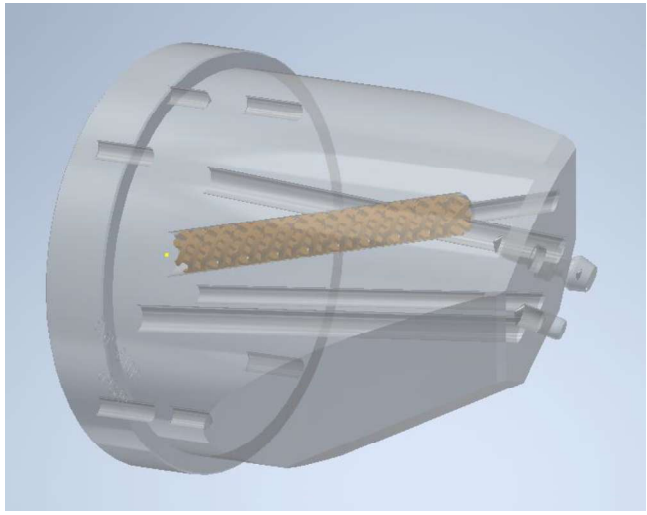
Impact

✅ Brought production in-house

✅ Reduced supplier dependence

✅ Reduced failure rate

Supplier Cost	In House Cost
~$10,000+	~$150



Project(s) Spotlight

Dynamic Cutaways & Product Demonstration

Projects

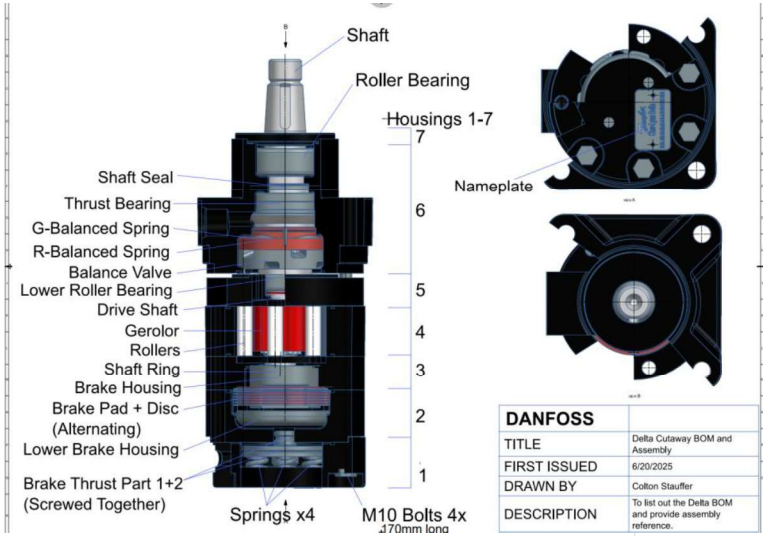
- Delta Cutaway
- GR3 Dynamic Cutaway
- MP1MV Display Model
- DDP Cutaway
- Ames Product Showcase

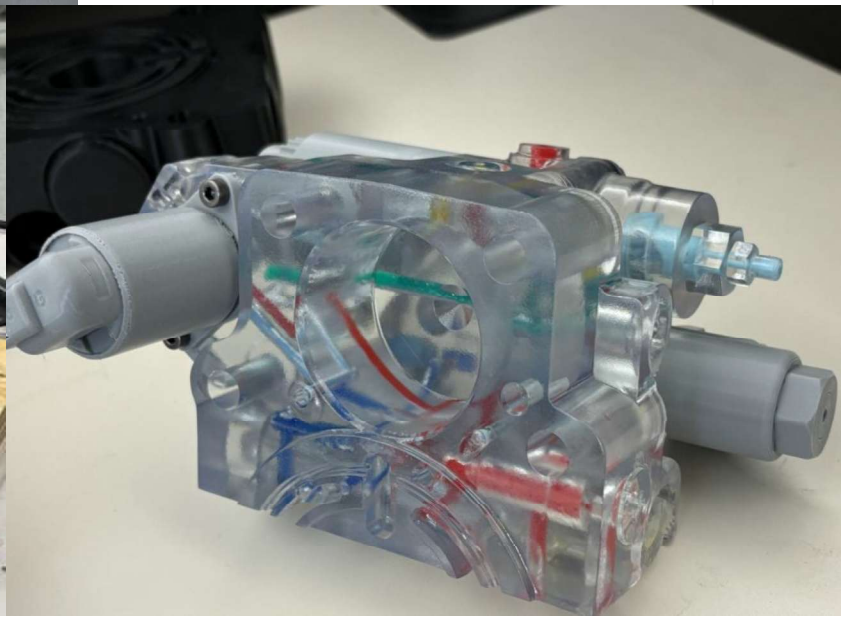
Contributions

- CAD modifications
- DFAM implementation
- Printing and assembly

Impact

- Improved product visualization
- Supported customer demonstrations
- Enabled technical discussions
- Assisted sales and marketing efforts





Project Spotlight

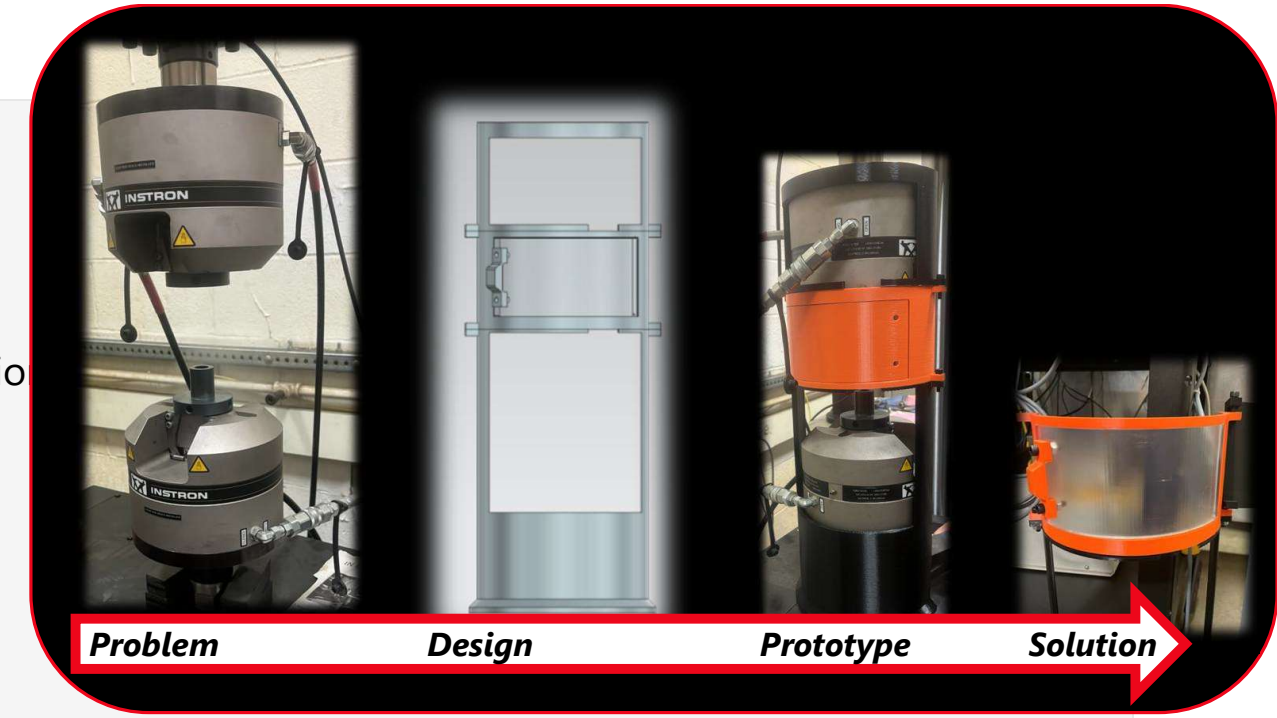
Equipment Shield

Objective

Develop a safer method for equipment operatio

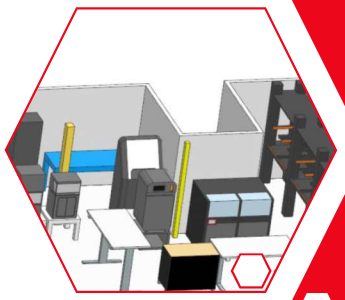
Contributions

- DFAM design
- Material selection
- Safety considerations
- Functional testing



Impact

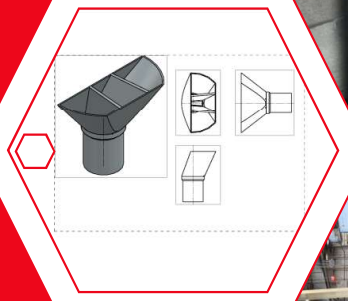
Enhanced equipment safety while demonstrating additive manufacturing's ability to solve facility challenges.



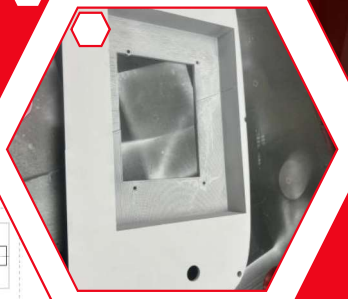
DDP Painting

Hot Air Exhaust System

ADC Sweeper Dashboard



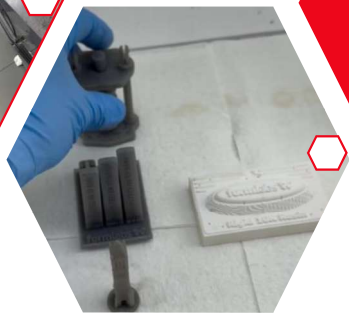
Bullet Continuous Improvements



Titanium Orifice Design

PCTG Hose mount Production

Ames Lab Video Tour



ADM Lab Scale Model

Puck Sample Drying Carousel