

# 3D ADDITIVE MANUFACTURING

aMDI is now a Certified Production Partner for Carbon3D

LET aMDI MAKE YOUR  
IDEA A REALITY WITH  
THE USE OF CARBON  
3D TECHNOLOGY.



## FROM CONCEPT TO PRODUCTION, FAST

Utilizing the M2 printer from Carbon 3D we are able to produce industry-standard parts, rapidly develop prototypes, and complete small quantities of finalized, production-ready pieces. Thanks to 3D additive manufacturing it has never been quicker and easier to obtain a final product.



## WORLD-CLASS TEAM OF ENGINEERS

We offer an expert team of technicians and engineers that span multiple disciplines and cover a wide variety of skills in order to make your product exactly the way you want it. If you need help designing or revising your part, our team can work with you to make your idea possible.



## ACCESS TO STRATEGIC PARTNERS

The applied Medical Device Institute (aMDI) is a fee-for service organization that serves the med device and technology community of Grand Rapids and beyond. As part of Grand Rapids and Grand Valley State University we have access to many industry partners and faculty experts that will not only provide valuable insight but will also help take your idea to the next level.



aMDI is devoted to the betterment of human health and well-being through applied medical device and technology innovation. We have the ability to connect you with educators, healthcare and industry professionals, as well as provide a great service to the community of Grand Rapids and beyond. With access to world-class labs, office space, and incubator services any idea can be developed right here.



**GRAND VALLEY  
STATE UNIVERSITY**

APPLIED MEDICAL  
DEVICE INSTITUTE



## WHAT DO WE OFFER?

aMDI offers a wide variety services such as:

- Design for 3D AM
- Small batch manufacturing
- Rapid prototyping
- Verification & Validation
- Product Conceptulization
- Testbed Development
- Incubator Space
- Mechanical Testing
- EMC Design & Testing



Utilizing 3D additive manufacturing we are able to not only significantly reduce your costs compared to traditional manufacturing but also accelerate the finalized product to market faster than ever before.

## COST ANALYSIS CASE STUDY

Unit Cost of Part by Comparative Manufacturing			
	Original Assembly	Combined 3D Additive Manufacturing	Design For 3D AM
Component Cost	\$20.84	\$24.80	\$18.62
Manufacturing Cost	\$2.65	\$1.26	\$1.26
Scrap Cost	\$3.52	\$0.52	\$0.40
Total Cost	\$27.01	\$26.58	\$20.28
	7 Components	1 Component	1 Component
		1% Material Reduction by Weight 2% Cost Savings	46% Material Reduction by Weight 25% Cost Savings



HAVE ADDITIONAL QUESTIONS OR  
CURIOUS IF 3D AM IS RIGHT FOR  
YOU?

Contact an aMDI expert  
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