America Makes

National Additive Manufacturing Innovation Institute

Overview

APR 2026

Distribution Statement A: Approved for Public Release

When America Makes, America Works®

MISSION

To accelerate the adoption of additive manufacturing by convening, coordinating, and catalyzing the AM industry to help advance U.S. manufacturing competitiveness and security.

MII Technology Vertical	Additive Manufacturing / 3D Printing
MII Established	August 2012
Institute Location	Youngstown, Ohio
Non-profit Legal Entity	National Center for Defense Manufacturing and Machining (NCDMM)
Membership	352 as of March 2026 from Industry, Academia, and Government
Facility	12,000 ft^2 of convening/collaboration space in Youngstown, Ohio
Expenditures & Cost Share	Total Portfolio valued at $652.9M
Contract Vehicle	Cooperative Agreement (CA) managed through Air Force Research Laboratory (AFRL)
Project Portfolio	396 Projects (104 Active)

Proud to partner with:

Strategic Focus Areas



Technology Development

Advancing Research & Technology
Partner with industry to drive investments in pre-competitive applied research and industrially-relevant manufacturing technologies.



Education & Workforce Development

Securing Human Capital
Educate, train, and grow the advanced manufacturing workforce by developing accessible industry-relevant tools to build strong talent pathways in AM.



Industrial Base Integration

Increase Awareness & Adoption of AM through regional, state, and national communities of practice within key regions and across industry, aligned around common objectives to spur economic growth and secure American competitiveness.

Public, Platinum, Gold Members



In addition to 265 Silver Members

Impact of America Makes

Technology Development

- Reducing novel material commercialization from 10+ years to 5
- Reduced AM certification timelines from 30 years to 7
- **Delta Qual:** Faster requalification; enabling AM supply-chain agility

Education & Workforce Development

- 400K courses taken by **>100K learners** through ToolingU-SME additive program
- **AMTrain:** Modern EdTech platform for curated state of the art additive training
- 4,188 service members + Vets impacted over the past 5 years

Industrial Base Integration

- AMCPR, AMNOW, JAMMEX: **supply chain readiness**; resilient industrial base with interoperable suppliers
- ATLAS-3D → Siemens Sunata™: Lab-to-market **tool transition** for distortion prediction & orientation automation

Why Aren't We Done Yet?

Important aspects still need to be solved in all 3 strategic focus areas: Technology, EWD, and Industrial Base

Remaining Challenges

- Repeatability and reproducibility
- **Qualification** (material, process, product)
- **Qualification cost and efficiency**
- **Inspectability** – technology and efficiency
- Fracture critical parts
- Certification
- Cost and cost reduction
- **Scaling to full production** (equivalence, requalification efficiency)
- Can vs. should
- Access to capital
- **Vendor qualification**

Known Limitations

- **Number of commercially available materials**
- **Number of qualified sources of supply**
- Knowledge base
- Implementation of DfAM
- **Trained workforce**
- Manufacturing operations experience
- **Size of parts**
- Feature sizes (e.g., section thickness)
- Most suited towards high mix, low volume applications
- **Serviceability, maintenance, and limitations** not well understood

Active Project Calls

Project Call Title	Release Date	Submission Due	Funding Total	Topic Area
Maturation Initiative for Additive Metals Interchangeability (MIAMI)	April 30, 2026	July 9, 2026	$12.4M	Allowables Generation
INtegrated System for In-situ Testing & Evaluation (INSITE)	April 30, 2026	July 9, 2026	$13.2M	Qualification/Certification
Delta Qual 2.0	March 31	June 2	$9M	Qualification/Certification
Generation of Technical-data for High-strength Aluminum Alloy Material (GOTHAAM)	March 31	June 2	$5.5M	Allowables Generation

More info can be found on americamakes.us

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