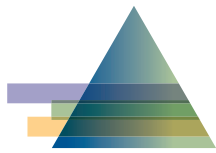


## EWI RESEARCH AND CONSORTIA:



# Additive Manufacturing Consortium

Operated by EWI

*The Additive Manufacturing Consortium (AMC) brings together a diverse group of industry, government, academic and research organizations to positively impact the AM landscape through collaborative meetings and cooperative projects.*

### Mission:

*To accelerate and advance the manufacturing readiness of metal additive manufacturing (AM) technologies*

### Goals:

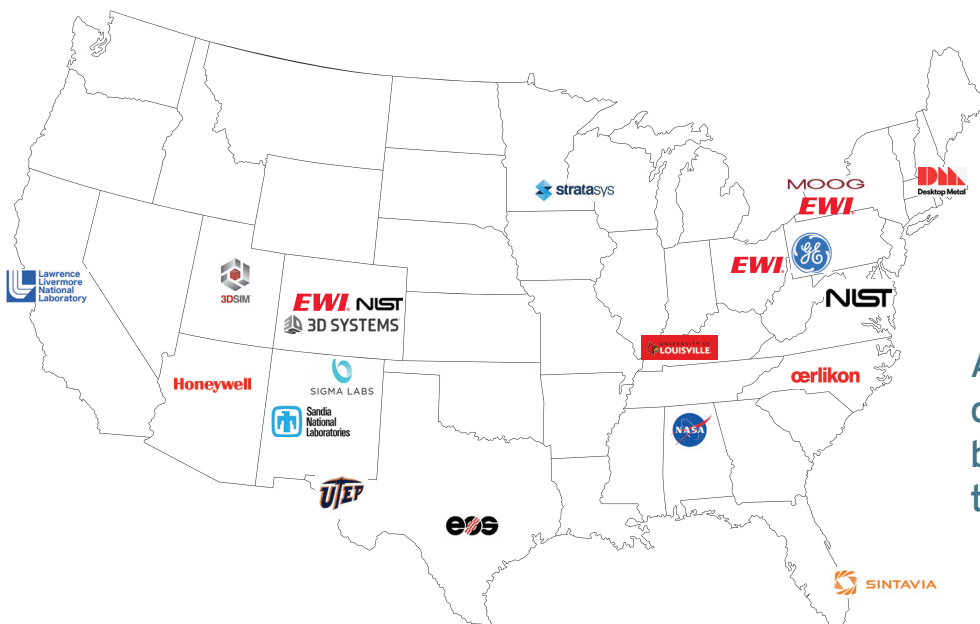
- To be a platform for **collaboration** across global industry, academia and government entities
- To develop and support group-sponsored, **pre-competitive** AM research projects
- To **partner** on government funding opportunities
- To provide a **forum** for discussion and networking among AM professionals

### Member Companies:

AMC comprises a wide range of industries including aerospace, space, defense, automotive, medical, oil and gas, and consumer/commercial products. Members come from industry, academia, and government, as well as equipment and material suppliers.

### Activities:

The cornerstone of AMC is technical discussion and advancement surrounding AM. Members, partners, and invited guests meet quarterly to discuss AM topics. Meetings consist of technical talks, tours, and informal social events to encourage extended conversation and promote collaboration.



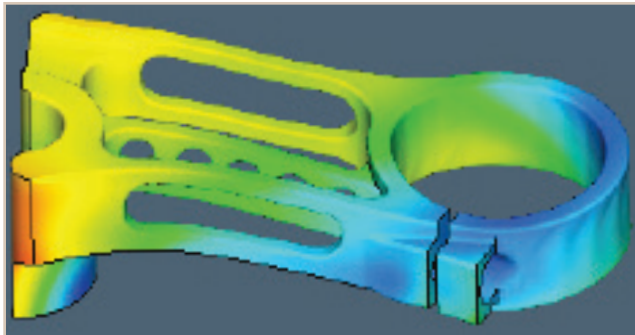
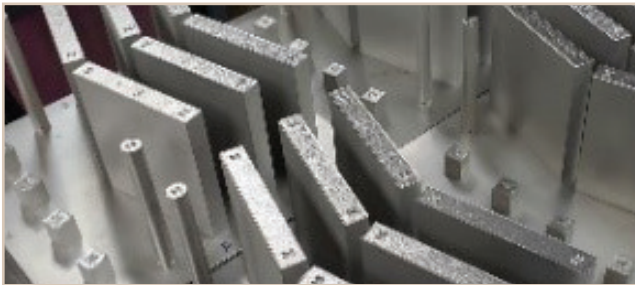
**AMC meetings are held quarterly and co-hosted by consortia members throughout the USA**

## The AMC Project Portfolio

AMC projects are funded annually by approximately \$2 million in cash and in-kind investments from its members.

Current projects include:

- **Continued Assessment of New Metal AM Technologies**
- **Investigation into Low Angle Printing Without Supports**
- **Optimize Process Parameters for Thin Wall Structures**
- **Continued Investigation into Multi-Laser L-PBF Systems Focusing on Overlap Techniques**
- **Continued Evaluation of Factors Affecting AS Built Surface Finish on L-PBF**



Members have access to results from previous AMC projects, including:

- **Evaluation of Post Process Techniques for AM**  
*Processing a part using eight post process techniques and comparing results*
- **In-Process Monitoring & Defect Rectification**  
*Evaluate performance of different repair strategies over varying L-PBF defect modes and levels as well as evaluate current commercial systems*
- **Study of Inconel 625 and 718**  
*Study effect of chemistry changes from different powder suppliers on microstructure and material properties*
- **DED Multi-material/ Repair**  
*Utilize Calphad simulation to produce a functionally graded component using DED*
- **Comparison of Commercially Available AM Simulation Tool**  
*Evaluate software simulation capabilities and performance comparisons; build a part and compare prediction to actuals*
- **Stainless Steel Multi-Process AM**  
*Evaluating microstructure and results of stainless steel parts printed using L-PBF and DED process*
- **Evaluation and Comparison of Different Powder Measurement Techniques**  
*Evaluate the various systems available and conduct a round robin study of how systems work and determine optimum usage for materials and particle sizes*

### Get Started

For more information or how to join the **Additive Manufacturing Consortium**, please contact:

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