EWI RESEARCH AND CONSORTIA:



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.



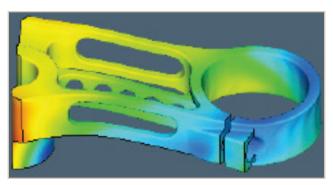
The AMC Project Portfolio

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
- High Strength Aluminum Testing and Characterization of Commercially Available Materials
- AMC Material Properties Database
- Continued Investigation into Low Angle Printing without Supports
- High Deposition Rate DED Trade Study and Demonstration





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
- 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

• Evaluation and Comparison of Different Powder

Get Started

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

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