





A Manufacturing USA Institute

# **Membership Benefits**

**By becoming a LIFT member**, you have the opportunity to network and collaborate with industry members who are also working on lightweighting solutions.

By working together on technology projects and education and workforce development initiatives, LIFT members are at the leading edge of moving the manufacturing industry forward.

#### **Benefits:**

- ➤ Participation in project reviews
- > Access to all technical information and reports
- ➤ Access to graduates of the university-funded programs
- Access to a Technical Help Desk
- ➤ Invitations to All LIFT Networking Events
- Secure Access to LIFT's "Members Only" Website





**LIFT** is a Detroit-based public-private partnership designed to help develop and deploy advanced lightweight metal manufacturing technologies, and implement education and training programs to better prepare the workforce today and in the future.

**LIFT** is a founding member of Manufacturing USA, a group of public-private partnerships with distinct technology focuses working toward a common goal: to secure the future of manufacturing in the United States through innovation, education, and collaboration.

Learn More About the Manufacturing USA institutes at www.manufacturingusa.com









To learn more about membership, visit us online www.lift.technology





**LIFT** is the one of the founding members of Manufacturing USA, the public name of the National Network of Manufacturing Innovation program to bring together industry, academia and federal partners to promote a robust and sustainable national manufacturing R&D infrastructure.



#### **Technology Projects**

Our expert project teams work with industry to research, develop, design and produce solutions to lightweight manufacturing problems. Project types include: Group sponsored: Private: RFPs: Commercial: Government; and Fast Forge rapid response

### Investing in the Workforce

We are developing a skilled workforce to address the manufacturing "skills gap" by investing in education and training to sustain, grow and attract manufacturing jobs.

### **Engineering Services**

Our team or engineering experts will help your organization find tailor-made solutions to your specific needs from design to manufacturing

#### Access to Manufacturing Equipment

LIFT's state-of-the-art facility will provide access to a full range of unique system capabilities capabilities across the metalworking industry.

#### **Business and Industry Collaboration**

Our broad base of members, partners and affiliates reach every corner of the manufacturing industry to help you expand your network and grow your business

## **Technology Help Desk**

Receive quick help with manufacturing problems or technical questions from a qualified expert within hours by submitting a question online or telephone



## Contact LIFT about our portfolio of services,

- Online: www.lift.technology/contact
- Phone: 313-309-9003
- Help Desk: 313-309-9159 or www.lift.technology/about/request-tech-help

THE TECHNOLOGY:



# Lightweight Metal Manufacturing





## Manufacturing Technology Transition

LIFT is a project-based research and development organization, with a member-driven technology roadmap, led by industry need. We take lightweighting projects from concept through design, development and production. Our project teams collaborate to play to the strengths of each participating member to reach their technology goals and close the gap between research breakthroughs and commercialization. We focus on 6 specific pillars of technology and 8 themes which are incorporated through each of them.

# 6 Pillars of Technology:



Processina



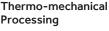
Novel/Agile Processing



Powder Processina



Coatings





## 8 Crosscutting Themes:



(Integrated Computational Materials Engineering)



Life-cycle Analysis



Supply chain



Validation/ Certification



Corrosion



Design



Cost modelina



Ballistic/ Blast

# **Education and Workforce Development**

Through the design and implementation of demand-driven, results-oriented, replicable, and scalable solutions we are developing an educated and skilled American workforce, confident in using new lightweighting technologies and processes.

## 11 Strategic Focus Areas:

- Understand workforce demandsupply gaps
- Ensure students gain STEM foundational skills for success in manufacturing careers
- Attract students and workers to educational pathways for careers in manufacturing
- Deploy more on and off ramps from education to employment
- Help disconnected youth and adults prepare for high quality, middle skills iobs
- Link and leverage related initiatives and resources on the ground today
- ▶ Teach the teachers
- Lightweighting technologies added to engineering design curricula
- Expand opportunities
- Fast track military personnel and veterans to skills development for manufacturing careers
- ➤ Offer on-the-job training solutions to our industry partners