

ASTM INTERNATIONAL CONFERENCE ON ADVANCED MANUFACTURING

Research to Application through Standardization

Submit an Abstract at www.amcoe.org/icam2024

Industrial Sector: Ground Transportation and Heavy Machinery

The ground transportation (on and off road) and heavy machinery industries are looking at additive manufacturing (AM) to provide benefits through redesign and part consolidation of existing components/ systems to improve performance and cost and mitigate lead time issues with casting and forging supply chains. Successful applications have focused on rapid tooling and solutions for low-volume production applications such as customization, but high-volume production and larger components remain a challenge for AM implementation. Barriers to adoption include the cost of AM production tied to large capital investment and low AM build rates, the need for suitable and cost-effective materials, and a lack of materials and process data and standards, leading to lengthy and costly qualification.

Topics of interest include but are not limited to:

- Advances in technologies, materials, and software to expedite industry adoption
- Impacts on supply chain and lead times
- Industrialization and scaling of AM for automotive/heavy machinery industries
- Economics of AM for automotive and heavy machinery industry
- Case studies of qualified metal and plastic applications
- Regulatory requirements and standardization needs
- Challenges and roadblocks that are faced in adoption of AM parts





Research to Standards