AM Applications for Automotive and Heavy Machinery

The automotive and heavy machinery industries continue to advance the use of additive manufacturing (AM) through a broad range of technologies and materials. These industries are looking to AM to enable benefits through redesign and part consolidation of existing components/systems to improve cost, performance, and lead time as well as changing design paradigms to imagine innovative new products. 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 data and standards to facilitate adoption with confidence in quality assurance.

This symposium covers AM application and standardization through the following topics:
- Advances in technologies to expedite industry adoption
- Impacts on supply chain and lead times
- Industrialization and scaling of AM for automotive/heavy machinery industries
- Regulatory requirements and standardization needs
- Economics of AM for automotive and heavy machinery industry
- Case studies in both metal and plastic parts
- Challenges and roadblocks that are faced in adoption of AM parts