

ASTM INTERNATIONAL CONFERENCE ON ADDITIVE MANUFACTURING

Research To Application Through Standardization

October 31 – November 4, 2022 | Orlando, FL JW Marriott Orlando Bonnet Creek Resort & Spa

Submit an Abstract at www.amcoe.org/icam2022

Application of AM in Energy, Maritime, and Oil & Gas

The pace of additive manufacturing (AM) technology diffusion and maturity vary across different industry verticals. As compared to the aerospace, automotive, and medical industries, the adoption of AM in the energy, maritime, and oil & gas industries has been moderate and is still very nascent. However, these sectors are aggressively exploring the potentials of using AM to improve operational efficiency. Many stakeholders in energy, maritime, and oil & gas have already demonstrated the capabilities of using AM to produce key components, which has triggered increased interest in the technology within these industries.

This symposium is focused on the application of AM in the energy, maritime, and oil & gas industries and covers the following topics:

- Specific operational requirements (emphasis on corrosion (NACE Compliance), wear, and fatigue)
- Diverse and novel applications –
 Sensors, Electronics etc.
- Materials development, testing for AM materials, and part qualification (ceramics, composites etc.)
- AM Modalities (non LPBF focused)
- Performance testing
- Automated workflows, and inventory digitization and management (Manufacturing Execution Systems)

- Design for Additive, Process simulation (Generative Design, latticing & topology optimization)
- In-situ monitoring and process control
- Post-processing & Inspection
- Regulatory, intellectual property rights (IPR), and warranty issues
- Sustainability with additive manufacturing
- Standardization, qualification, and certification
- On-site, flexible AM cells for local spare parts and repair
- Challenges to AM adoption



Symposium Organizers

- Ole Geisen,
 Siemens Energy, Germany
- Matt Sanders,
 Stress Engineering, USA
- Lakshmi Vendra, Baker Hughes, USA
- Valeria Tirelli, AIDRO, Italy



Research to Standards

ADDITIVE MANUFACTURING