Christopher Arnold
MTU Aero Engines AG

Topic

Laser Powder Bed Fusion of Ti-6Al-4V for Aerospace Applications

The aerospace industry demands materials that combine high strength, low weight, and exceptional resistance to extreme environmental conditions. Titanium alloys, particularly Ti-6Al-4V, are favored in aerospace applications due to their superior mechanical properties and corrosion resistance. This presentation explores the innovative use of Laser Powder Bed Fusion (L-PBF) technology for the additive manufacturing of Ti-6Al-4V components, highlighting the potential and challenges associated with the design and production of aerospace components.

About the Speaker

Christopher Arnold is Development Engineer and Project Manager in the Materials Engineering Department at MTU Aero Engines AG in Munich. Currently, his work focuses on the additive manufacturing of compressor materials for engine components. He obtained a Ph.D. in Materials Science and Engineering at FAU Erlangen-Nürnberg with a scientific focus on advanced processing technologies for electron beam additive manufacturing.