

DESIGN FOR METAL ADDITIVE MANUFACTURING

REGISTER
HERE



21 OCTOBER 2021
10:00 - 11:30 CET



JOIN
HERE



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AGENDA

10:00 Introduction

MANUELA, a metal Additive Manufacturing (AM) pilot line service relying on Laser Powder Bed Fusion (LPBF) and Electron Beam Melting (EBM), covering the full AM chain.

10:05 General Workflow - From specifications to AM printed part

Overview of the standard workflow.

10:10 Process Details: specifications – design manufacturing simulations – print job – post processing – quality assurance

Rethinking a design to account for AM: presentation of design flow, including available design tools; highlighting the importance of process qualification and quality assurance in AM.

This design flow will be illustrated with 6 use cases.

10:40 Use Cases:

- **Avionics:** helmet display housing (QIOPTIC) → example of printing orientation, support and post process machining.
- **Space:** slip ring rotor and stator (RUAG) → example of topology optimization, design for AM.
- **Medical:** cranial implant (CEIT) → example of support optimization, orientation and deformation.
- **Power plant:** gas turbine combustor and injector (ENEL) → example of AM adaptation (multi-parts) and postprocessing.
- **Automotive:** rocker and brake support (OEB) → example of AM adaptation and small features.
- **Energy: fuel nozzle** (SIEMENS) → example of small features.