

Meeting Date/Time: 07.07.2025 / 13:00

Participants : SCAI, Reden, Aerobase, SINTEF, TUM, Eindhoven University of Technology, University Patras, TWI, Cranfield University, Amsight

Agenda:

1. Introduction of New Members

The news members TWI and Cranfield University introduced themselves and their intention to join the AM WG. Amsight joined the meeting later in the hour.

2. Use Case example by Aerobase

- Modelling: Laser intensity optimization and scanning path are the key factors to build an optimized product.
- Microstructure: By changing the laser beams and desired microstructure can be achieved. This, however, requires some further research.
- Multiphysics aspect: Laser beams and the intensity will also affect the shape of the melt pool
- Computational time: The evaluation of melt pools can be done on smaller coupons to reduce the time.

3. Other Parameters/Factor for standardization

- a. Melt Pool Shape
- b. Machinery Set-up
- c. Data Validation & Comparison

4. Some common pain points for Standardization

5. Next Steps

Presentation by TWI/Cranfield on the 'Metal Additive Manufacturing' Benchmark by NAFEMS.

Each partner to document their key data parameters

6. Next Meeting

August 04, 2025, at 13:00 CEST