

Multiscale Simulation and Process Analysis of the PBF-LB/M Process

Enabling Industries Through Quicker Process Simulation



Motivation and Relevance

- Enabling Simulation of Larger Parts
- Long calculation times for thermomechanical simulation
- Low accuracy of distortion calculation

Approach

- Reducing simulation times through numerical reduction
- Development of compensation strategies for stress and distortion minimizing

Results

- Multiscale simulation model for PBF-LB/M process
- Process strategies for stress and distortion minimizing manufacturing
- Description of temperature history and distortion in additive manufactured parts

Research Area

- Simulation
- Accuracy
- Parameter Control

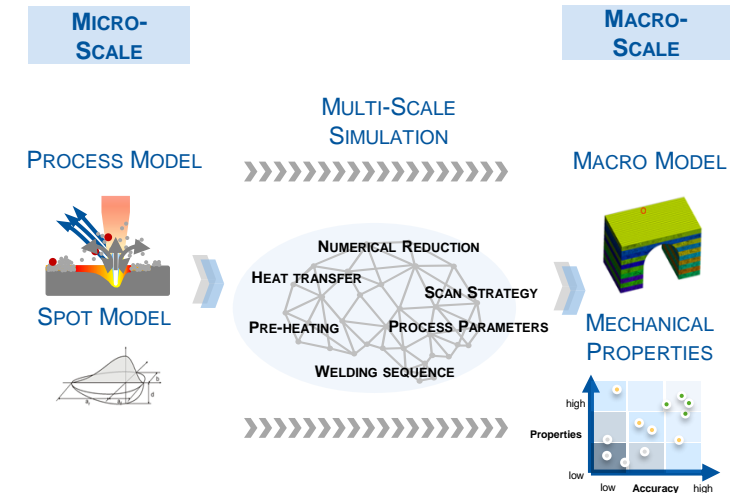
Partners



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