

AdHoPe: Improving PBF-LB/M Process Quality by Reducing Local Heat Gradients

Enabling Industries Through Simulation and Sensor-data-based Process Control



Motivation and Relevance

- Different process parameters are needed due to varying thermal conductivity depending on a part's geometry
- There is a need of first-time right by previously adapting process parameters in addition to in-process control of process parameters

Approach

- Research and optimization of a simulation and sensor data-based process control for PBF-LB/M
- Goal: Geometry-adaptive prevention of overheating to increase quality without restricting productivity

Results

- Simulation and sensor-based method to enable first-time right
- Experimental demonstration of quality improvement without productivity decrease

Research Area

- PBF-LB/M
- Simulation
- Process Control

Partners



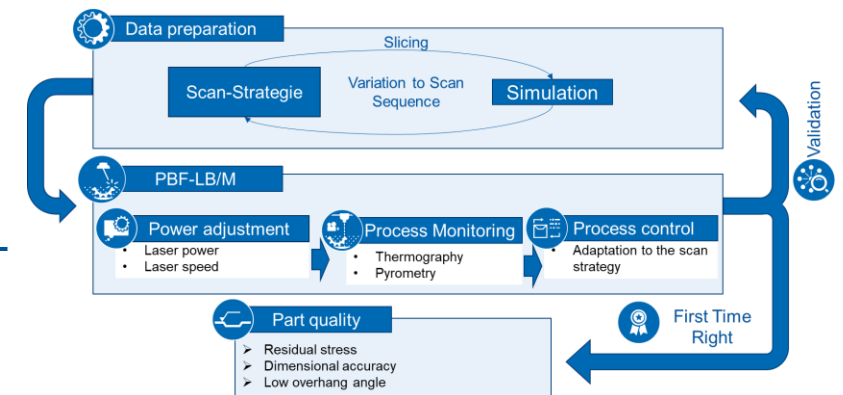
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Picture



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