

Automated Lightweight Design of Additive Gripper Jaws



Motivation and Relevance

- Gripping process needs customized grippers, this causes costs in development and manufacturing
- Lack of automated process chains for the construction of grippers in the industry

Approach

- Development of an automated and simulation-based design of the grippers by using a digital twin
- Re-Use of the material used for the grippers after end of life
- Development and validation of the digital process chain for the manufacturing of new grippers

Results

- Design of a digital and simulation-based process chain for additive manufacturing of grippers
- Validated methods to recycle additive gripper jaws after usage

Research Area

- Process chain
- Assembly
- Production
- Sustainability

Partners



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Picture



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