Product and production concepts for the variant-flexible hairpin stator production (HaPiPro²)



Enabling Industries Through Intelligent Additive Design for Innovative E-machines

Motivation and Relevance

- State of the art production systems of hairpin stators for emachines are dedicated to one product design
- Iterated e-machine generations lead to down times of production and further investments in tools fixtures

Approach

- Developing new production tool concepts taking advantage of AM potentials
- Implementing design algorithms of developed tool and part concepts for rapid changing of designs regarding hairpin stator properties

Results

- DfAM: Exploit design potentials of AM
- Design Scripting → Develop digital assistant systems
- Reduce manual construction work, development time and cost

Research Area

- E-machines
- Electromobility
- Algorithmic design

Partners

Ministerium für Wirtschaft, Innovation. Digitalisierung und Energie des Landes Nordrhein-Westfalen





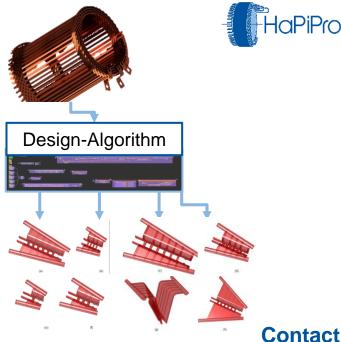








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