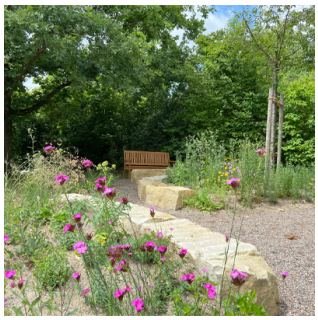
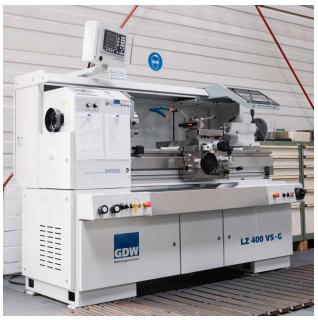
Institut für
Integrierte Produktion Hannover

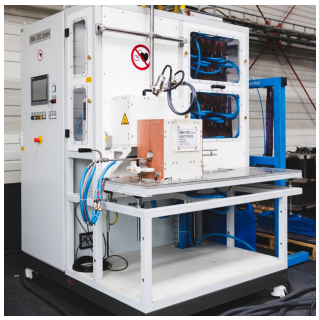
Bachelor thesis, master thesis

Development of a Software Demonstrator for Heating Profiles

Energy savings are essential for reducing costs in bulk metal forming. The sector is one of the most energy-intensive industries in Germany. In order to manufacture products sustainably while maintaining their margins in a competitive industrial environment, companies are under increasing pressure to reduce energy consumption.

As part of a research project, we are supporting industry in developing a partial heating strategy for semi-finished products so that only the sections relevant to the forming process need to be heated for a cross-wedge rolling process.



Your tasks

As part of a student research project or final thesis, you will develop a software demonstrator for modelling the geometric

heating profile based on experimental data covering multiple factors that influence the heating and forming processes.

You will take the respective influence of each factor into account and extend the software model accordingly.

Your profile

You are studying one of the following subjects:

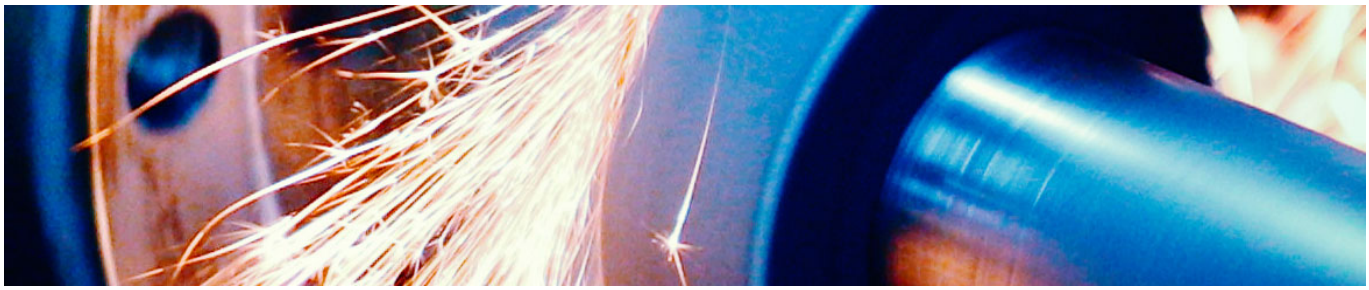
- Mechanical Engineering
- Computational Engineering
- Industrial Engineering, with a focus on production engineering
- Computer Engineering
- or a related degree programme

You are interested in programming and mathematical problem-solving. You also have experience statistical data analysis, preferably using MATLAB or Minitab.

Good written and spoken German and/or English skills are required.

We offer

- Independent scientific work
- Well-equipped workplaces
- Remote work by arrangement
- Shared use of the kitchen
- Potential for long-term collaboration



Bitte sende deine aussagekräftige Bewerbung in einer einzigen PDF-Datei an jobs@iph-hannover.de.

Die Bewerbung muss Anschreiben, Lebenslauf sowie Prüfungsleistungen des Studiums / Zeugnisse enthalten.

Contact

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