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Bachelor Thesis

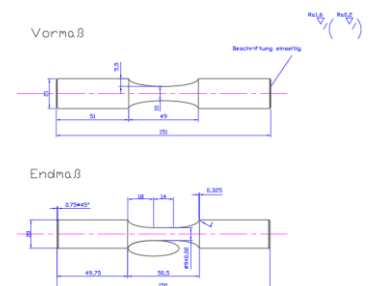
„Analysis of the temperature effects on GS22 Steel creep behaviour through Finite Element Modelling“

Short description:

This project aims to analyse the creep behaviour of GS22 steel under different temperature conditions by using Finite Element Modelling. The research will involve a comprehensive study of the material properties of GS22 steel, the effect of temperature on its creep behaviour and the development of accurate FEM simulations to predict this behaviour under different conditions.

Essential Activities:

- Perform FEM simulations to understand the creep behaviour of GS22 steel at different temperatures.
- Conduct literature review of cast steels and their creep behaviour.
- Develop and validate Finite Element Model by simulating the creep behaviour.
- Analyze data and FEM result to draw conclusion.



Additional Information:

- Candidates should have a fundamental background in mechanical engineering, have experience of finite element analysis software (preferably Simcenter 3D) and have analytical skills for data interpretation. Familiarity with creep behaviour and material characterisation is an advantage.
- The project will be supervised by faculty members specialising in mechanical engineering and FEM. Students will have access to the necessary software tools and experimental data belongs to the laboratory tests.

Contact:

For further inquiries to submit applications, please contact:

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