

Announcement of a Master Thesis, 16.04.2020

Improvement of tensile test specimens for BETA 250-5 hot tensile test machine

Description

The BETA 250-5 machine is a thermomechanical simulator that can heat the samples until the melting temperature in a vacuum atmosphere. With this machine, hot tensile tests are performed with samples from different alloys until the rupture. Currently, the samples used for the tests have the geometry as shown in Figure 1. The goal of this thesis is to improve the geometry of the sample in order to reduce the amount of material used to produce the samples and improve the heating, making it possibly more even through the specimen volume. Both changes must be achieved without compromising the test results.

The work shall be divided into the following tasks:

- Literature study about the hot tensile test
- Suggestion of solutions based on effectiveness and costs
- Testing of the chosen solution and further improvements, if necessary
- Documentation and thesis report

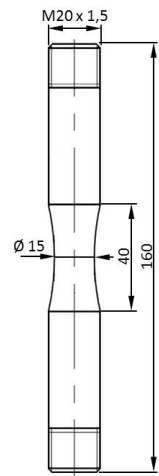


Figure 1: Tensile test specimen for the BETA 250-5 machine.

Organisation

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Further information

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