Fraunhofer IMTE



Non-Destructive Testing of AM-Parts

Accredited testing lab, based on high resolution computed tomography

At Fraunhofer IMTE, we use high-resolution computed tomography to analyze your parts with technology that specializes in the needs of additive manufacturing. Metrological assessment of dimension, form, and positional deviations, as well as defect analysis, supports the development and optimization of processes, materials, and products.

The testing lab at Fraunhofer IMTE offers reliable measurement of your components. Using state-of-the-art industrial computed tomography (CT), materials and parts can be fully examined in high-resolution 3D – fast, precise, and non-destructive. Our materials testing service provides maximum safety, transparency, and efficiency when looking inside a part without damaging its exterior.

Accredited according to DIN EN ISO/IEC 17025:2018 in accordance with DIN EN ISO 9001, our certified services include the determination of dimensional, form, and positional deviations of components using industrial computed tomography, defect analysis of components, and radioscopic inspection of metallic and non-metallic objects – in particular additively manufactured parts – according to DIN EN ISO 15708-03:2019.

Non-destructive testing enables compliance with specified tolerances to be verified and defects such as cracks, pores, shrinkage cavities, and inclusions to be visualized and measured in three dimensions. Measurements are metrologically traceable and include specified measurement uncertainties. The contact-free testing process enables reliable quality assurance without damaging the component and provides high-resolution 3D data for research, development, and quality control.

Beyond the accredited scope, we also offer tensile, compression, and flexural testing, hardness testing according to Rockwell, Knoop, Brinell, and Vickers, as well as scanning electron and laser scanning microscopy.

Fraunhofer Research Institution for Individualized Medical Technology and Engineering IMTE

Dr. Thomas Friedrich Head of Testing Lab
testing@imte.fraunhofer.de

exhibit overview