

## Annex to the Accreditation Certificate D-PL-111-40-09; Fraunhofer IZFP is accredited in the following fields:

Manual and mechanized nondestructive testing (surface and volume testing) for quality properties, inhomogeneities, physical characterization of microstructural differences, layer thicknesses, magnetic and electrical properties of materials and components for plant and machinery construction, and transportation engineering consisting of metals, ceramics, plastics, carbon fiber and metal fiber reinforced materials as well as of composite materials, building materials and organic materials.

## The list of verified norms and standards in the accredited fields of Fraunhofer IZFP includes:

Process description No. 0005	Manual ultrasonic testing
Process description No. 0011	Automated ultrasonic testing
Process description No. 0022	Signal processing for automated ultrasound testing (methods: "ALOK" and "SAFT")
Process description No. 0023	Ultrasonic phased array testing of welded joints, cast iron and rolled parts and forgings
DIN EN 10160	Ultrasonic testing of steel flat products of thickness equal or greater than 6 mm (reflection method)
DIN EN 10228-3	Nondestructive testing of steel forgings – Part 3: Ultrasonic testing of ferritic or martensitic steel forgings
DIN EN ISO 13588	Nondestructive testing of welded joints – Ultrasonic testing – Use of automated phased array technology
DIN EN ISO 16810	Nondestructive testing – Ultrasonic testing – General principles (chapter 9 – Testing)
DIN EN ISO 16826	Nondestructive testing – Ultrasonic testing – Inspection for inhomogeneities perpendicular to the surface
DIN EN ISO 16827	Nondestructive testing – Ultrasound testing – Characterization and sizing of inhomogeneities
DIN EN ISO 17640	Nondestructive testing of welded joints – Ultrasound testing – Techniques, testing levels, and assessment
Stahl-Eisen-Prüfblatt (SEP) 1927	Ultrasonic immersion testing method for determining the macroscopic cleanliness rate of rolled or forged steel bars
Process description No. 0001	Penetrant testing
DIN EN ISO 3452-1	Nondestructive testing – Penetrant testing – Part 1: General principles
DIN EN 10228-2	Nondestructive testing of steel forgings – Part 2: Penetrant testing
DIN EN ISO 17636-2	Nondestructive testing of welded joints – Radiographic testing – Part 2: X- and gamma-ray techniques with digital detectors

This document is a translation. The definitive version is the original German annex to the accreditation certificate.



Process description No. 0015	Microradioscopy
Process description No. 0018	Qualitative computer tomography
AD 2000-Merkblatt HP 5/3	Manufacture and testing of joints – Nondestructive testing of welded joints

As of may 2021

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