

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-17161-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 08.03.2021

Date of issue: 24.08.2023

Holder of certificate:

**J & L Zerstörungsfreie Werkstoffprüfung GmbH
Friedrich-Ebert-Straße 75, 51429 Bergisch Gladbach**

Tests in the fields:

manual nondestructive test methods (radiographic-, ultrasonic-, magnetic particle-, penetration-, visual testing) of metallic materials in the metal production and metalworking industry as well as in the plant engineering

The testing laboratory is permitted, without being required to inform and obtain prior approval from DAkks, to use standards or equivalent testng methods liested here with different issue dates. The testing laboratory maintains a current list of all testing procedures within the flexible scope of accreditation.

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

Abbreviations used: see last page

*The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH.
<https://www.dakks.de/en/accredited-bodies-search.html>*

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1 Radiographic testing

DIN EN ISO 5579 2014-04	Non-destructive testing - Radiographic testing of metallic materials using film and X- or gamma rays - Basic rules
DIN EN ISO 17636-1 2013-05	Non-destructive testing of welds - Radiographic testing - Part 1: X- and gamma-ray techniques with film
DIN EN 12681-1 2018-02	Founding - Radiographic testing - Part 1: Film techniques
DIN EN ISO 10893-6 2019-06	Non-destructive testing of steel tubes - Part 6: Radiographic testing of the weld seam of welded steel tubes for the detection of imperfections
DIN EN ISO 20769-1 2018-12	Non-destructive testing - Radiographic inspection of corrosion and deposits in pipes by X- and gamma rays - Part 1: Tangential radiographic inspection
DIN EN ISO 20769-2 2018-12	Non-destructive testing - Radiographic inspection of corrosion and deposits in pipes by X- and gamma rays - Part 2: Double wall radiographic inspection

2 Manual ultrasonic testing

DIN EN ISO 17640 2019-02	Non-destructive testing of welds - Ultrasonic testing - Techniques, testing levels, and assessment
DIN EN 10160 1999-09	Ultrasonic testing of steel flat product of thickness equal to or greater than 6 mm (reflection method)
DIN EN 10228-3 2016-10	Non-destructive testing of steel forgings - Part 3: Ultrasonic testing of ferritic or martensitic steel forgings
DIN EN 10228-4 2016-10	Non-destructive testing of steel forgings - Part 4: Ultrasonic testing of austenitic and austenitic-ferritic stainless steel forgings
DIN EN 12680-1 2003-06	Founding - Ultrasonic examination - Part 1: Steel castings for general purposes
DIN EN 12680-2 2003-06	Founding - Ultrasonic examination - Part 2: Steel castings for highly stressed components
DIN EN 12680-3 2012-02	Founding - Ultrasonic testing - Part 3: Spheroidal graphite cast iron castings

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DIN ISO 4386-1 2015-12	Plain bearings - Metallic multilayer plain bearings - Part 1: Non-destructive ultrasonic testing of bond of thickness $\geq 0,5$ mm
DIN EN 10307 2002-03	Non-destructive testing - Ultrasonic testing of austenitic and austenitic-ferritic stainless steels flat products of thickness equal to or greater than 6 mm (reflection method)
DIN EN 10308 2002-03	Non-destructive testing - Ultrasonic testing of steel bars
DIN EN ISO 17405 2014-10	Non-destructive testing - Ultrasonic testing - Technique of testing claddings produced by welding, rolling and explosion
SEP 1915 1994-09	Ultrasonic testing of steel pipes for longitudinal defects <i>(withdrawn document)</i>
SEP 1918 1992-01	Ultrasonic testing of steel pipes for teransverse defects <i>(withdrawn document)</i>
SEP 1920 1984-12	Ultrasonic testing of rolled semi-finished products on internal material discontinuities
SEP 1923 2009-02	Ultrasonic testing of steel forgings to stringent standards, in particular for components in turbine and generator systems
SEL 072 1977-12	Ultrasonically tested heavy plate - Technical delivery conditions <i>(withdrawn document)</i>

3 Magnetic particle testing

DIN EN ISO 17638 2017-03	Non-destructive testing of welds - Magnetic particle testing
DIN EN 10228-1 2016-10	Non-destructive testing of steel forgings - Part 1: Magnetic particle inspection
DIN EN 1369 2013-01	Founding - Magnetic particle testing
DIN EN ISO 9934-1 2017-03	Non-destructive testing - Magnetic particle testing - Part 1: General principles
DIN EN ISO 10893-5 2011-07	Non-destructive testing of steel tubes - Part 5: Magnetic particle inspection of seamless and welded ferromagnetic steel tubes for the detection of surface imperfections

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4 Penetrant testing

DIN EN ISO 3452-1 2014-09	Non-destructive testing - Penetrant testing - Part 1: General principles
DIN EN 1371-1 2012-02	Founding - Liquid penetrant testing - Part 1: Sand, gravity die and low pressure die castings
DIN EN 1371-2 2015-04	Founding - Liquid penetrant testing - Part 2: Investment castings
DIN EN 10228-2 2016-10	Non-destructive testing of steel forgings - Part 2: Penetrant testing
DIN EN ISO 3452-5 2009-04	Non-destructive testing - Penetrant testing - Part 5: Penetrant testing at temperatures higher than 50 °C
DIN EN ISO 3452-6 2009-04	Non-destructive testing - Penetrant testing - Part 6: Penetrant testing at temperatures lower than 10 °C
DIN EN ISO 10893-4 2011-07	Non-destructive testing of steel tubes - Part 4: Liquid penetrant inspection of seamless and welded steel tubes for the detection of surface imperfections
DIN ISO 4386-3 1992-11	Plain bearings - Metallic multilayer plain bearings - Part 3: Non-destructive penetrant testing

5 Visual testing

DIN EN ISO 17637 2017-04	Non-destructive testing of welds - Visual testing of fusion-welded joints
DIN EN 1370 2012-03	Founding - Examination of surface condition
DIN EN 13018 2016-06	Non-destructive testing - Visual testing - General principles

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6 Cross-process standards (here for the methods RT, UT, MT, PT, VT) *

DIN EN ISO 17635 2010-08	Non-destructive testing of welds - General rules for metallic materials
ASME BPVC, Section 5 Edition 2019	ASME Boiler & Pressure Vessel Code - Section 5: Nondestructive Examination (here: <i>RT, UT, MT, PT, VT</i>)

7 Cross-procedural directives (here for the test methods RT, UT, MT, PT, VT)

DVGW GW 350 2015-06	Welding Joints of Steel Pipelines for Gas and Water Supply - Manufacturing, Testing and Evaluation
AD 2000-Merkblatt HP 5/3 Anlage 1 2015-04	Non-destructive testing of welded joints - Minimum requirements for non-destructive testing methods

Abbreviations used:

AD	Working group pressure vessels
ASME	American Society of Mechanical Engineers
DIN	German Institute for Standardization
DVGW	German Technical and Scientific Association for Gas and Water, Technical Rules
EN	European standard
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
MT	Magnetic particle testing
PT	Penetrant testing
RT	Radiographic testing
SEL	Steel-iron delivery conditions
SEP	Steel-iron test sheets
UT	Ultrasonic testing
VT	Visual testing
ZfP	Non-destructive testing

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