

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-11246-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 29.03.2021

Date of issue: 01.04.2021

Holder of certificate:

MEYER WERFT GmbH & Co. KG
Werkstoffprüflabor
Industriegebiet Süd, 26871 Papenburg

at the locations:

Industriegebiet Süd, 26871 Papenburg
Werftallee 13, 18059 Rostock-Warnemünde

Tests in the fields:

manual non-destructive tests¹ (ultrasonic, phased-array ultrasonic test, digital radiography, thermography, penetration test, magnetic particle test, visual test) and structural-mechanical tests (tensile test, charpy impact test, bend test, hardness tests, fracture test), optical emissions spectroscopy (OES)¹ as well as selected welding and metallographic joints and fittings tests of metallic materials in the metals manufacturing and processing Industry, in installation engineering, plant construction, in pressure vessel constructions and in naval engineering; thermographic investigation¹ of ship machinery, electro technical facilities, pressure vessels and naval engineering facilities

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

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories. Laboratories that conform to the requirements of this standard, operate generally in accordance with the principles of DIN EN 9001.

The certificate together with its annex reflects the status as indicated by the date of issue. The current status of any given scope of accreditation may be found respectively in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH. <https://www.dakks.de/en/content/accredited-bodies-dakks>

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The test methods are indicated with the following abbreviations of the locations in which they are conducted:

Papenburg = P

Rostock = R

1 Manual non-destructive tests (P, R)

1.1 Ultrasonic tests / Phased-Array ultrasonic tests

DIN EN 10160 1999-09	Ultrasonic testing of steel flat product of thickness equal to or greater than 6 mm (reflection method)
DIN EN ISO 17640 2019-02	Non-destructive testing of welds - Ultrasonic testing - Techniques, testing levels, and assessment
DIN EN 12680-1 2003-06	Founding - Ultrasonic examination - Part 1: Steel castings for general purposes (here: <i>only chapter 5</i>)
DIN EN ISO 17405 2014-10	Non-destructive testing - Ultrasonic testing - Technique of testing claddings produced by welding, rolling and explosion
DIN EN ISO 13588 2019-07	Non-destructive testing of welds - Ultrasonic testing - Use of automated phased array technology
DIN EN ISO 22825 2018-02	Non-destructive testing of welds - Ultrasonic testing - Testing of welds in austenitic steels and nickel-based alloys
AD 2000-Merkblatt HP 5/3 Anlage 1 2015-04	Manufacture and testing of joints - Non-destructive testing of welded joints (here: <i>chapter 3</i>)

1.2 Radiographic test / digital radiographic test

DIN EN ISO 17636-2 2013-05	Non-destructive testing of welds - Radiographic testing - Part 2: X- and gamma-ray techniques with digital detectors
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1.3 Thermography

DIN 54191
2017-10 Non-destructive testing - Thermographic testing of electric installations
(here: *chapter 6.2 and 6.5*)

DIN 54190-1
2004-08 Non-destructive testing - Thermographic testing - Part 1: General principles
(*withdrawn standard*)

1.4 Penetration tests

DIN EN ISO 3452-1
2014-09 Non-destructive testing - Penetrant testing - Part 1: General principles
(here: *chapter 8*)

DIN EN 10228-2
2016-10 Non-destructive testing of steel forgings - Part 2: Penetrant testing

1.5 Magnetic particle tests

DIN EN ISO 9934-1
2017-03 Non-destructive testing - Magnetic particle testing - Part 1: General principles
(here: *clause 7 - 14*)

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

1.6 Visual tests

DIN EN 13018
2016-06 Non-destructive testing - Visual testing - General principles
(hier: *clauses 5 and 6*)

DIN EN ISO 17637
2017-04 Non-destructive testing of welds - Visual testing of fusion-welded joints

2 Mechanical structural tests (P)

2.1 Tensile tests

DIN EN ISO 6892-1 2017-02	Metallic materials - Tensile testing - Part 1: Method of test at room temperature (here: <i>method B</i>)
DIN EN ISO 9018 2016-02	Destructive tests on welds in metallic materials - Tensile test on cruciform and lapped joints
DIN EN ISO 4136 2013-02	Destructive tests on welds in metallic materials - Transverse tensile test
DIN EN ISO 5178 2019-05	Destructive tests on welds in metallic materials - Longitudinal tensile test on weld metal in fusion welded joints

2.2 Impact test

DIN EN ISO 148-1 2017-05	Metallic materials - Charpy pendulum impact test - Part 1: Test method
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2.3 Bend tests

DIN EN ISO 5173 2012-02	Destructive tests on welds in metallic materials - Bend tests
DIN EN ISO 7438 2016-07	Metallic materials - Bend test
SEP 1390 1996-07	Weld bead bend test

2.4 Hardness tests

DIN EN ISO 6506-1 2015-02	Metallic materials - Brinell hardness test - Part 1: Test method
DIN EN ISO 6507-1 2018-07	Metallic materials - Vickers hardness test - Part 1: Test method

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DIN EN ISO 6508-1 2016-12	Metallic materials - Rockwell hardness test - Part 1: Test method
DIN EN ISO 9015-1 2011-05	Destructive tests on welds in metallic materials - Hardness testing - Part 1: Hardness test on arc welded joints
DIN 50156-1 2007-07	Metallic materials - Leeb hardness test - Part 1: Test method
DIN 50159-1 2015-01	Metallic materials - Hardness testing with the UCI method - Part 1: Test method

2.5 Fracture test

DIN EN ISO 9017 2018-04	Destructive tests on welds in metallic materials - Fracture test
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3 Optical Emission Spectroscopy (OES) ^{1,2} (P)

TI 00227 Rev. 1 2020-01	Conducting optical emission spectroscopy (OES)
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4 Selected metallographic joints and fittings tests (P)

DIN EN ISO 1463 2004-08	Metallic and oxide coatings - Measurement of coating thickness - Microscopical method
DVS 2922 2019-07	Testing of flash butt, resistance butt and magnetically impelled arc butt welding connections
DIN EN ISO 17639 2013-12	Destructive tests on welds in metallic materials - Macroscopic and microscopic examination of welds

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Abbreviations used:

AD	working group for pressure vessels
DIN	German Institute for Standardisation
DVS	German Association for Welding and Related Processes
EN	European Standard
ISO	International Organisation for Standardisation
SEP	Steel-iron test sheets from the Association of German Ironworks
TI	In-house test method of Materials Testing Laboratory of Meyer Werft

¹ tests conducted in the test laboratory as well as on-site

² not covered within the flexible scope of accreditation