

# Deutsche Akkreditierungsstelle

## Annex to the Accreditation Certificate D-PL-19083-01-00 according to DIN EN ISO/IEC 17025:2018

**Valid from:** 14.02.2024

**Date of issue:** 14.02.2024

Holder of accreditation certificate:

**Uhlig Z(f)P GmbH**  
**Innerstetal 16, 38658 Langelsheim**

with the location

**Uhlig Z(f)P GmbH**  
**Innerstetal 16, 38658 Langelsheim**

The testing laboratory meets the requirements of DIN EN ISO/IEC 17025:2018 to carry out the conformity assessment activities listed in this annex. The testing laboratory meets additional legal and normative requirements, if applicable, including those in relevant sectoral schemes, provided that these are explicitly confirmed below.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and they conform to the principles of DIN EN ISO 9001.

*This certificate annex is only valid together with the written accreditation certificate and reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at <https://www.dakks.de>.*

Abbreviations used: see last page

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Tests in the fields:

**mechanic-technological testing of metallic materials (tensile test, hardness test, bend test, impact test);  
structural examination and corrosion testing of metallic materials**

**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.**

**1 Tensile test**

DIN EN ISO 6892-1 2020-06	Metallic materials - Tensile testing - Part 1: Method of test at room temperature
DIN EN 6892-2 2018-09	Metallic materials - Tensile testing - Part 2: Method of test at elevated temperature
ASTM E 21 2020	Standard Test Methods for Elevated Temperature Tension Tests of Metallic Materials
DIN EN ISO 4136 2022-09	Destructive tests on welds in metallic materials - Transverse tensile test
ASME Section IX QW-150 2021	Tension test
ASTM E 8/E 8M 2022	Standard Test Methods for Tension Testing of Metallic Materials
DIN EN ISO 5178 2019-05	Destructive tests on welds in metallic materials - Longitudinal tensile test on weld metal in fusion welded joints

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**2 Hardness test**

DIN EN ISO 6507-1 2018-07	Metallic materials - Vickers hardness test - Part 1: Test method
ASTM E 92 2017	Standard Test Method for Vickers and Knoop Hardness of Metallic Materials
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 EN ISO 9015-2 2016-10	Destructive tests on welds in metallic materials - Hardness testing - Part 2: Microhardness testing of welded joints

**3 Bend test**

DIN EN ISO 7438 2021-03	Metallic materials - Bend test
DIN EN ISO 5173 2023-05	Destructive tests on welds in metallic materials - Bend tests
ASME Section IX QW-160 2021	Guided-bend test
DIN EN ISO 9017 2018-04	Destructive tests on welds in metallic materials - Fracture test
DIN EN ISO 8492 2014-03	Metallic materials - Tube - Flattening test
ASTM E 190 2021	Standard Test Method for Guided Bend Test for Ductility of Welds

**4 Impact test**

DIN EN ISO 148-1 2017-05	Metallic materials - Charpy pendulum impact test - Part 1: Test method
ASTM E 23 2019	Test Methods for Notched Bar Impact Testing of Metallic Materials

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**5 Structural examination**

DIN EN ISO 17639 2022-05	Destructive tests on welds in metallic materials - Macroscopic and microscopic examination of welds
DIN EN ISO 643 2020-06	Stahl - Mikrophotographische Bestimmung der scheinbaren Korngröße
ASTM E 112 2013	Standard Test Methods for Determining Average Grain Size
ISO 9042 1988-12	Steels - Manual point counting method for statistically estimating the volume fraction of a constituent with a point grid
ASTM E 562 2019	Standard Test Method for Determining Volume Fraction by Systematic Manual Point Count
DIN EN ISO 1463 2021-08	Metallic and oxide coatings - Measurement of coating thickness - Microscopical method

**6 Corrosion testing**

DIN EN ISO 3651-1 1998-08	Determination of resistance to intergranular corrosion of stainless steels - Part 1: Austenitic and ferritic-austenitic (duplex) stainless steels - Corrosion test in nitric acid medium by measurement of loss in mass (Huey test)
DIN EN ISO 3651-2 1998-08	Determination of resistance to intergranular corrosion of stainless steels - Part 2: Ferritic, austenitic and ferritic-austenitic (duplex) stainless steels - Corrosion test in media containing sulfuric acid
SEP 1870 1979-06	Determining the resistance of stainless steels to intergranular corrosion - Huey test
SEP 1877 1994-07	Test of the resistance of high-alloy, corrosion-proof materials against intercrystalline corrosion
ASTM A 262 2015	Standard Practices for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels
ASTM G 28 2015	Standard Test Methods for Detecting Susceptibility to Intergranular Corrosion in Wrought, Nickel-Rich, Chromium-Bearing Alloys

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**Abbreviations used:**

ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
DIN	German Institute for Standardization
EN	European Standard
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
SEP	Steel and iron test sheet of the Association of German Steel Institute

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