DAkkS
Deutsche
Akkreditierungsstelle

Deutsche Akkreditierungsstelle GmbH

Entrusted according to Section 8 subsection 1 AkkStelleG in connection with Section 1 subsection 1 AkkStelleGBV
Signatory to the Multilateral Agreements of EA, ILAC and IAF for Mutual Recognition

Accreditation

The Deutsche Akkreditierungsstelle GmbH attests that the testing laboratory

SWS Werkstoffprüfung GmbH
Plauener Straße 36 b, 08491 Netzschkau

is competent under the terms of DIN EN ISO/IEC 17025:2018 to carry out tests in the following fields:

manual non-destructive testing (radiographic-, ultrasonic-, magnetic particle-, penetration- and visual testing) and mechanical-technological tests (charpy impact test; tensile test; bending test; hardness test; X-ray fluorescence analysis; macroscopic and microscopic analysis) at metallic materials of the metal production and -processing industry as well as within plant engineering and construction

The accreditation certificate shall only apply in connection with the notice of accreditation of 18.11.2019 with the accreditation number D-PL-19010-01. It comprises the cover sheet, the reverse side of the cover sheet and the following annex with a total of 5 pages.

Registration number of the certificate: **D-PL-19010-01-00**

Berlin, 18.11.2019	Dipl.-Ing. (FH) Ralf Egner Head of Division	Translation issued: 22.11.2019	Head of Division

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/content/accredited-bodies-dakks

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

See notes overleaf.

Deutsche Akkreditierungsstelle GmbH

Office Berlin
Spittelmarkt 10
10117 Berlin

Office Frankfurt am Main
Europa-Allee 52
60327 Frankfurt am Main

Office Braunschweig
Bundesallee 100
38116 Braunschweig

The accreditation was granted pursuant to the Act on the Accreditation Body (AkkStelleG) of 31 July 2009 (Federal Law Gazette I p. 2625) and the Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products (Official Journal of the European Union L 218 of 9 July 2008, p. 30). DAkkS is a signatory to the Multilateral Agreements for Mutual Recognition of the European co-operation for Accreditation (EA), International Accreditation Forum (IAF) and International Laboratory Accreditation Cooperation (ILAC). The signatories to these agreements recognise each other's accreditations.

The up-to-date state of membership can be retrieved from the following websites:
EA: www.european-accreditation.org
ILAC: www.ilac.org
IAF: www.iaf.nu

DAkkS
Deutsche
Akkreditierungsstelle

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-19010-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 18.11.2019

Date of issue: 18.11.2019

Holder of certificate:

SWS Werkstoffprüfung GmbH
Plauener Straße 36 b, 08491 Netzschkau

Tests in the fields:

manual non-destructive testing (radiographic-, ultrasonic-, magnetic particle-, penetration- and visual testing) and mechanical-technological tests (charpy impact test; tensile test; bending test; hardness test; X-ray fluorescence analysis; macroscopic and microscopic analysis) at metallic materials of the metal production and -processing industry as well as within plant engineering and construction

Within the scope of accreditation marked with *, the testing laboratroy 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 Manual non-destructive testing

1.1 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

1.2 Ultrasonic testing *

DIN EN ISO 17640 2019-02	Non-destructive testing of welds - Ultrasonic testing - Techniques, testing levels, and assessment
DIN EN ISO 16810 2014-07	Non-destructive testing - Ultrasonic testing - General principles
DIN EN 10308 2002-03	Non-destructive testing - Ultrasonic testing of steel bars
DIN EN 10160 1999-09	Ultrasonic testing of steel flat product of thickness equal to or greater than 6 mm (reflection method)
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 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
AD 2000-Data sheet HP 5/3 Attachment 1 2015-04	Non-destructive testing of welded joints - Minimum requirements for non-destructive testing methods (here: *Chapter 3*)

1.3 Magnetic particle testing *

DIN EN ISO 9934-1 2017-03	Non-destructive testing - Magnetic particle testing - Part 1: General principles
DIN EN ISO 17638 2017-03	Non-destructive testing of welds - Magnetic particle testing
DIN EN 1369 2013-01	Founding - Magnetic particle testing

DIN EN 10228-1 2016-10	Non-destructive testing of steel forgings - Part 1: Magnetic particle inspection

1.4 Penetrant testing *

DIN EN ISO 3452-1 2014-09	Non-destructive testing - Penetrant testing - Part 1: General principles
DIN EN 10228-2 2016-10	Non-destructive testing of steel forgings - Part 2: Penetrant testing
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

1.5 Visual testing *

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

1.6 Cross-procedural and co-applicable standards *

DIN EN ISO 17635 2017-04	Non-destructive testing of welds - General rules for metallic materials

2 Mechanical-technological tests

2.1 Charpy impact test *

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

-Translation-

2.2 Tensile test *

DIN EN ISO 6892-1 2017-02	Metallic materials - Tensile testing - Part 1: Method of test at room temperature
DIN EN ISO 4136 2013-02	Destructive tests on welds in metallic materials - Transverse tensile test

2.3 Bend test *

DIN EN ISO 7438 2016-07	Metallic materials - Bend test
DIN EN ISO 5173 2012-02	Destructive tests on welds in metallic materials - Bend tests

2.4 Hardness test *

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 6507-1 2018-07	Metallic materials - Vickers hardness test - Part 1: Test method

2.5 X-ray fluorescence analysis - RFA (Test for mixed-up components)

SOP 14 Rev. 01-02	X-ray fluorescence analysis (Test for mixed-up components)
DIN 51418-2 * 2015-03	X-ray spectrometry - X-ray emission and X-ray fluorescence analysis (XRF) - Part 2: Definitions and basic principles for measurements, calibration and evaluation of results

2.6 Macroscopic and microscopic analysis *

DIN EN ISO 17639 2013-12	Destructive tests on welds in metallic materials - Macroscopic and microscopic examination of welds

-Translation-

DAkkS Deutsche Akkreditierungsstelle

abbreviations used:

AD-HP	Working group pressure vessel; Production and testing of pressure vessels
DIN	German Institute for Standardization
EN	European standard
ISO	International Organization for Standardization
SOP	In-house method of SWS Werkstoffprüfung GmbH

-Translation-

Valid from: 18.11.2019
Date of issue: 18.11.2019