

Accreditation



The Deutsche Akkreditierungsstelle attests with this **Accreditation Certificate** that

Karlsruher Institut für Technologie

with its testing laboratory

**Versuchsanstalt für Stahl, Holz und Steine
Otto-Ammann-Platz 1, 76131 Karlsruhe**

meets the requirements of DIN EN ISO/IEC 17025:2018 for the conformity assessment activities specified in the following partial accreditation certificates. This includes additional existing legal and normative requirements for the testing laboratory, including those in relevant sectoral schemes, provided that these are explicitly confirmed in the annexes to the partial accreditation certificates listed below.

D-PL-11068-01-01

D-PL-11068-01-02

D-PL-11068-01-03

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

This accreditation was issued in accordance with Art. 5 Para. 1 Sentence 2 of Regulation (EC) 765/2008, after an accreditation procedure was carried out in compliance with the minimum requirements of DIN EN ISO/IEC 17011 and on the basis of a review and decision of the appointed accreditation committees.

This accreditation certificate consists of this cover sheet, the reverse side of the cover sheet and the following annex. It only applies in connection with the partial accreditation certificates listed above and the notices referred to there.

Registration number of the certificate: **D-PL-11068-01-00**

Berlin, 27.09.2023

Dipl.-Ing. Gabriel Zrenner
Head of Department

Translation issued:
27.09.2023

by proxy Tim Hae...

Dipl.-Ing. Gabriel Zrenner
Head of Department

The certificate together with the annex 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 (www.dakks.de).

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 Deutsche Akkreditierungsstelle GmbH (DAkkS) is the entrusted national accreditation body of the Federal Republic of Germany according to § 8 section 1 AkkStelleG in conjunction with § 1 section 1 AkkStelleGBV. DAkkS is designated as the national accreditation authority by Germany according to Art. 4 Para. 4 of Regulation (EC) 765/2008 and clause 4.7 of DIN EN ISO/IEC 17000.

Pursuant to Art. 11 section 2 of Regulation (EC) 765/2008, the accreditation certificate shall be recognised as equivalent by the national authorities within the scope of this Regulation as well as by the WTO member states that have committed themselves in bilateral or multilateral mutual agreements to recognise the certificates of accreditation bodies that are members of ILAC or IAF as equivalent.

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 Co-operation (ILAC).

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

Deutsche Akkreditierungsstelle

Annex to the Accreditation Certificate D-PL-11068-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 27.09.2023

Date of issue: 27.09.2023

Holder of accreditation certificate:

Karlsruher Institut für Technologie

with its testing laboratory

**Versuchsanstalt für Stahl, Holz und Steine
Otto-Ammann-Platz 1, 76131 Karlsruhe**

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 in the annexes to the partial accreditation certificates listed below.

D-PL-11068-01-01

D-PL-11068-01-02

D-PL-11068-01-03

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Accreditation



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Karlsruher Institut für Technologie

with its testing laboratory

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This partial accreditation certificate only applies in connection with the notices of 27.09.2023 with accreditation number D-PL-11068-01.

It consists of this cover sheet, the reverse side of the cover sheet and the following annex with a total of 9 pages.

Registration number of the partial accreditation certificate: **D-PL-11068-01-01**

It is a part of the accreditation certificate D-PL-11068-01-00.

Berlin, 27.09.2023

Dipl.-Ing. Gabriel Zrenner
Head of Department

Translation issued:
27.09.2023

by proxy Tim Blau

Dipl.-Ing. Gabriel Zrenner
Head of Department

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with its testing laboratory

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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 confirm generally with the principles of DIN EN ISO 9001.

Physical and mechanical testing and fire behaviour testing of steel and lightweight constructions and testing of building products, building kits and building types;

Testing of construction products (system of assessment and verification of constancy of performance 3) within the scope of the Regulation (EU) No. 305/2011 laying down harmonised conditions for the marketing of construction products (Construction Products Regulation)

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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Annex to the Partial Accreditation Certificate D-PL-11068-01-01

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

1 Physical and mechanical testing and fire behaviour testing of steel and lightweight constructions

1.1 Timber products and fasteners

DIN EN 408 2012-10	Timber structures - Structural timber and glued laminated timber - Determination of some physical and mechanical properties <u>here Sections:</u> 5 Determination of dimensions of test pieces 6 Determination of moisture content of test pieces 7 Determination of density of test pieces 9 Determination of local modulus of elasticity in bending 10 Determination of global modulus of elasticity in bending 11 Determination of the shear modulus according to section 11.2 Shear field test method 12 Determination of modulus of elasticity in tension parallel to the grain 13 Determination of tension strength parallel to the grain 14 Determination of modulus of elasticity in compression parallel to the grain 15 Determination of compression strength parallel to grain 16 Determination of tension and compression strength perpendicular to the grain 17 Determination of modulus of elasticity perpendicular to the grain 18 Determination of shear strength parallel to the grain 19 Bending strength parallel to grain
DIN EN 409 2009-08	Timber structures - Test methods - Determination of the yield moment of dowel type fasteners
DIN EN 1382 2016-07	Timber structures - Test methods - Withdrawal capacity of timber fasteners
DIN EN 1383 2016-07	Timber structures - Test methods - Pull through resistance of timber fasteners
EAD 130118-01-0603	Screws and threaded rods for use in timber constructions

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Annex to the Partial Accreditation Certificate D-PL-11068-01-01

EAD 130336-00-0603	Point connector - Dovetail made of plywood for cross laminated timber
EN 1995-1-1:2004 + AC:2006 + A1:2008	Eurocode 5: Design of timber structures - Part 1-1: General - Common rules and rules for buildings <u>here Sections:</u> 7.1 Joint slip 8.3 Nailed connections 8.4 Stapled connections 8.5 Bolted connections 8.9 Split ring and shear plate connectors 8.10 Toothed-plate connectors
DIN EN 13183-1 2002-07 + Corrigenda 1 2003-12	Moisture content of a piece of sawn timber - Part 1: Determination by oven dry method
DIN EN 14358 2016-11	Timber structures - Calculation and verification of characteristic values
DIN EN 15737 2009-12	Timber structures - Test methods - Torsional resistance of driving in screws
ASTM F 1575/F 1575M 2021	Standard Test Method for Determining Bending Yield Moment of Nails

1.2 Reaction to fire tests

DIN EN ISO 11925-2 2020-07	Reaction to fire tests – Ignitability of products subjected to direct impingement of flame – Part 2: Single-flame source test
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In conjunction with:

DIN EN 13501-1 Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests

DIN 4102-1 1998-05	Fire behaviour of building materials and building components - Part 1: Building materials; concepts, requirements and tests
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2 Testing of Building Products, Building Types, Building Parts and Building Structures

2.1 Testing of building products and building types

DIN EN 14509 2013-12	<p>Self-supporting double skin metal faced insulating panels – Factory made products – Specifications</p> <p><u>here Annexes:</u></p> <p>A.1: Cross panel tensile test</p> <p>A.2: Compressive strength and modulus of the core material</p> <p>A.3: Shear test on the core material</p> <p>A.3.5: Calculations and results - short-term loading</p> <p>A.3.6: Test procedures, calculations and results - long term loading</p> <p>A.4: Test to determine the shear properties of a complete panel</p> <p>A.5: Test to determine the bending moment capacity of a simply supported panel</p> <p>A.6: Determination of the creep coefficient (φ_t)</p> <p>A.7: Interaction between bending moment and support force</p> <p>A.8: Determination of apparent core density and mass of panel</p> <p>A.9: Test for resistance to point loads and repeated loads</p> <p>A.15: Support reaction capacity at the end of a panel</p> <p>B.2: Test DUR1 - Annex B.3: Test DUR2</p> <p>B.5: Adhesive bond between faces and prefabricated core material (wedge test)</p> <p>B.6: Repeated loading test</p> <p>C.1.2: Fire test EN ISO 11925-2 (ignitability test)</p> <p>C.4: Determination of the amount and thickness of the adhesive layer</p> <p>D.2: Dimensional tolerances</p>
EAD 030351-00-0402	<p>Systems of mechanically fastened flexible roof waterproofing sheets – here tests according table 7 except for the unwinding test</p>
<p>ETAG 006 2000-03 + draft of change of 05.01.2007</p>	<p>Guideline for European technical approval of systems of mechanically fastened flexible roof waterproofing membranes</p> <p><u>here:</u></p> <p>Annex D of the change version draft</p> <p><i>in conjunction with:</i></p> <p>DIN EN 12691:2006-06 and ISO 179-1:2010-11, except for the unwinding test</p>

Annex to the Partial Accreditation Certificate D-PL-11068-01-01

2.2 Testing of building parts and building structures

DIN EN 74-1 2022-09	Couplers, spigot pins and baseplates for use in falsework and scaffolds – Part 1: Couplers for tubes – Requirements and test procedures
DIN EN 12810-2 2004-03	Façade scaffolds made of prefabricated components – Part 2: Particular methods of structural design
DIN EN 12811-3 2003-02	Temporary works equipment - Part 3: Load testing
DIN EN 14782 2006-03	Self-supporting metal sheet for roofing, external cladding and internal lining – Product specification and requirements <u>here:</u> Section 4.3.2: Resistance of roofing products to concentrated forces
DIBt publications, Series B, Volume 5, 2008-04	Approval assessment procedures for service and working scaffolds - requirements, structural analysis, load testing and proof of conformity <u>here:</u> section 4 - tests
CUAP 03.02/14	Cable net systems <u>here Chapter:</u> 2.4.1: Tension resistance of stainless steel wire ropes for static load 2.4.2: Modulus of elasticity of stainless steel wire ropes for static loads 2.4.3: Slipping resistance of clamp for static loads 2.4.4: Tension resistance of shackles for static loads 2.4.5: Safety of horizontal cable net systems against impact loads 2.4.6: Safety of vertical cable net systems against impact loads
CUAP 06.02/02	Tension Rod System <u>here:</u> Section 4.1: Determination of characteristic values of tension resistance by tension test
CUAP 06.02/03	Point Fastener – Testing of load bearing capacity <u>here:</u> Section 2.4.1.1 Methods of verification

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Annex to the Partial Accreditation Certificate D-PL-11068-01-01

CUAP 06.02/07

Fastening screws for metal members and sheeting

here Chapter:

2.4.1: Shear resistance of the connections

2.4.2: Tension resistance of the connections

3.2: Tasks of the manufacturer and notified bodies

- Measurement of the geometry in accordance with Table 3 in conjunction with the DIBt Guideline of 01.08.1999, Section 3.1
- Shear fracture testing in accordance with Table 3 in conjunction with ECCS publication no. 42, Section B.3.4.2
- Shear fracture testing in accordance with Table 3 in conjunction with the DIBt Guideline of 01.08.1999, Section 3.7
- Bolt penetration behaviour and torsion fracture in accordance with Table 3 in conjunction with the DIBt Guideline of 01.08.1999, Sections 3.3.1, 3.3.2, 3.4.1 and 3.4.2
- Hydrogen embrittlement in accordance with Table 3 in conjunction with the DIBt Guideline of 01.08.1999, Section 3.6
- Ductility (bolt head impact testing) in accordance with Table 3 in conjunction with the DIBt Guideline of 01.08.1999, Section 3.5 and DIN EN ISO 898-1

CUAP 06.02/09

Prefabricated steel and stainless steel wire ropes with end connectors

here Chapter:

2.4.1: Tension resistance

2.4.2: Modulus of elasticity

Annex to the Partial Accreditation Certificate D-PL-11068-01-01

CUAP 06.02/12	<p>Fastening Screws for Sandwich Panels <u>here Chapter:</u></p> <p>2.4.1: Shear resistance of the connections 2.4.2: Tension resistance of the connections 2.4.3: Design resistance in case of combined tension and shear forces 2.4.4: Check of bending capacity in case of thermal expansion (bending test)</p> <p>3.2: Tasks of the manufacturer and notified bodies</p> <ul style="list-style-type: none"> - Measurement of the geometry in accordance with Table 3 in conjunction with the DIBt Guideline of 01.08.1999, Section 3.1 - Shear fracture testing in accordance with Table 3 in conjunction with ECCS publication no. 42, Section B.3.4.2 - Shear fracture testing in accordance with Table 3 in conjunction with the DIBt Guideline of 01.08.1999, Section 3.7 - Bolt penetration behaviour and torsion fracture in accordance with Table 3 in conjunction with the DIBt Guideline of 01.08.1999, Sections 3.3.1, 3.3.2, 3.4.1 and 3.4.2 - Hydrogen embrittlement in accordance with Table 3 in conjunction with the DIBt Guideline of 01.08.1999, Section 3.6 - Ductility (bolt head impact testing) in accordance with Table 3 in conjunction with the DIBt Guideline of 01.08.1999, Section 3.5 and DIN EN ISO 898-1
CUAP 06.02/13	<p>Blind rivets for metal members and sheeting <u>here Chapter:</u></p> <p>2.4.1: Shear resistance of the connections 2.4.2: Tension resistance of the connections 2.4.3: Shear resistance of blind rivet 2.4.4: Tension resistance of blind rivet 2.4.5: Design resistance in case of combined tension and shear forces</p> <p>3.2: Tasks of the manufacturer and notified bodies</p> <ul style="list-style-type: none"> - Measurement of the geometry in accordance with Table 4 in conjunction with the DIBt Guideline of 01.08.1999, Section 2.1
CUAP 03.02/16	<p>Roof and Wall Systems with Hidden Fastenings <u>here Chapter:</u></p> <p>2.4.1: Mechanical resistance and stability, safety in use 2.4.3: Corrosion protection of elements made of metal</p>
EAD 331072-00-0601	<p>Anchor Devices for Fastening Personal Fall Protection Systems to Concrete Structures <u>here Chapter:</u></p> <p>2.2.4: Static load 2.2.5: Dynamic loading 2.2.6: Check of deformation capacity in case of constraining forces 2.2.7: Durability</p>

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Annex to the Partial Accreditation Certificate D-PL-11068-01-01

- ECCS publication no. 124 The Testing of Connections with Mechanical Fasteners in Steel Sheeting and Sections
here: Chapter 3: Test Procedures
- CIB Report publication 320/
ECCS publication no. 127 Preliminary European Recommendations for testing and design of fastenings for sandwich panels
here Chapter:
2: Testing of fastenings used to fix the panels to the frames of buildings
3: Testing of fastenings installed to a face layer
4: Additional tests

3 Testing of construction products (system of assessment and verification of constancy of performance 3) within the scope of the Regulation (EU) No. 305/2011 laying down harmonised conditions for the marketing of construction products (Construction Products Regulation)

Decision / Resolution of the Commission	System ¹⁾	Technical Specification
1997/176/EC structural timber products	3	EN 14545:2008 Timber structures - Connectors - Requirements
		EN 14592:2008+A1:2012 Timber structures - Dowel-type fasteners - Requirements

¹⁾ System for assessment and verification of constancy of performance

The requirements for a testing laboratory in accordance with Article 43 of the Construction Products Regulation are fulfilled.

Without prior approval by the DAkkS German Accreditation Body, the testing laboratory body is permitted to use new revisions of harmonised technical specifications.

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Annex to the Partial Accreditation Certificate D-PL-11068-01-01

Abbreviations used:

CIB	International Council for Research and Innovation in Building and Construction
CUAP	Common Understanding Assessment Procedure
DIBt	Deutsches Institut für Bautechnik
DIN	Deutsches Institut für Normung e. V.
EAD	European Assessment Document
EN	European Standard
ECCS	European Convention for Constructional Steelwork
ETAG	European Technical Approval Guideline
ISO	International Organization for Standardization

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

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It consists of this cover sheet, the reverse side of the cover sheet and the following annex with a total of 7 pages.

Registration number of the partial accreditation certificate: **D-PL-11068-01-02**

It is a part of the accreditation certificate D-PL-11068-01-00.

Berlin, 27.09.2023

Dipl.-Ing. Gabriel Zrenner
Head of Department

Translation issued:
27.09.2023

by proxy Tim H...
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The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and confirm generally with the principles of DIN EN ISO 9001.

**Mechanical-technological testing of metal materials and products, plastics and composite materials;
Testing of metallic and organic coatings and coated metals**

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

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>.

Annex to the Partial Accreditation Certificate D-PL-11068-01-02

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1 Mechanical-technological Testing

DIN EN ISO 148-1 2017-05	Metallic materials - Charpy pendulum impact test - Part 1: Test method
DIN EN ISO 179-1 2010-11	Plastics - Determination of Charpy impact properties - Part 1: Non-instrumented impact test
DIN EN ISO 898-1 2013-05	Mechanical properties of fasteners made of carbon steel and alloy steel - Part 1: Bolts, screws and studs with specified property classes - Coarse thread and fine pitch thread Section 9.2, 9.3, 9.6, 9.9, 9.13
DIN EN ISO 2702 2011-08	Heat-treated self-tapping screws – Mechanical properties Section 6.2.1: Screw-in test Section 6.2.2: testing of the torsional strength
DIN EN ISO 3506-1 2020-08	Fasteners - Mechanical properties of corrosion-resistant stainless steel fasteners - Part 1: Bolts, screws and studs with specified grades and property classes Section 7.2.2: tensile strength Section 7.2.3: 0,2%-proof stress Section 7.2.4: elongation at fracture Section 7.2.5: fracture torque Section 7.2.6 angular tensile test on screws from martensitic steel Section 7.2.7: hardness HB, HRC, or HV
DIN EN ISO 3506-2 2020-08	Fasteners - Mechanical properties of corrosion-resistant stainless steel fasteners - Part 2: Nuts with specified grades and property classes Section 7.1: hardness, HB, HRC or HV Section 7.2: test force

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Annex to the Partial Accreditation Certificate D-PL-11068-01-02

DIN EN ISO 3506-3 2010-04	Mechanical properties of corrosion-resistant stainless steel fasteners - Part 3: Set screws and similar fasteners not under tensile stress Section 6: Test Methods
DIN EN ISO 3506-4 2010-04	Mechanical properties of corrosion-resistant stainless steel fasteners – Part 4: Tapping screws Section 6: Test Methods
DIN EN ISO 4136 2022-09	Destructive tests on welds in metallic materials - Transverse tensile test
DIN EN ISO 5173 2012-02	Destructive tests on welds in metallic materials - Bend 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
DIN EN ISO 6892-1 2020-06	Metallic materials - Tensile testing - Part 1: Method of test at room temperature – procedure B
DIN EN ISO 7438 2021-03	Metallic materials - Bend 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 9015-2 2016-10	Destructive tests on welds in metallic materials - Hardness testing - Part 2: Microhardness testing of welded joints
DIN EN ISO 9017 2018-04	Destructive tests on welds in metallic materials - Fracture test
DIN EN ISO 9018 2016-02	Destructive tests on welds in metallic materials - Tensile test on cruciform and lapped joints
DIN EN ISO 10666 2000-02	Drilling screws with tapping screw thread - Mechanical and functional properties Section 4.2.1: Drilling - and screw-in test Section 4.2.3: Torsional strength test
DIN EN ISO 14555 2017-10	Welding - Arc stud welding of metallic materials Section 11: Investigation and test

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DIN EN ISO 14589 2001-08	Blind rivets - Mechanical testing
DIN EN ISO 15630-3 2020-02	Steel for the reinforcement and prestressing of concrete - Test methods - Part 3: Prestressing steel Section 5 tensile test Section 8 isothermal relaxation test Section 9 axial dynamic test
DIN EN ISO 17660-1 2006-12 + Corrigenda 1 2007-08	Welding - Welding of reinforcing steel - Part 1: Load-bearing welded joints Section 14.2: tensile test Section 14.3: shear test Section 14.4: bending test
DIN EN 1320 1996-12	Destructive tests on welds in metallic materials - Fracture test
DIN EN 1382 2016-07	Timber structures - Test methods - Withdrawal capacity of timber fasteners
DIN EN 10002-1 2001-12	Metallic materials - Tensile testing - Part 1: Method of testing at ambient temperature
DIN EN 12390-3 2019-10	Testing hardened concrete - Part 3: Compressive strength of test specimens
DIN EN 15048-2 2016-09	Non-preloaded structural bolting assemblies - Part 2: Fitness for purpose Section 6: Tensile Test of Bolt/Nut Assemblies
DIN EN 20898-2 1994-02	Mechanical properties of fasteners; part 2: nuts with specified proof load values; coarse thread
DIN 7337 1997-05	Break mandrel blind rivets Section 8
DIN 50106 2022-07	Testing of metallic materials - Compression test at room temperature

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DIBt Guidelines of 01.08.1999 Principles for verification of compliance for fastening elements in lightweight metal constructions section 2: blind rivet
Section 2.1 Dimensional Testing
Section 2.3 Application and Functional Testing section: 3 screws
Section 3.1 Verification of Dimensions and Manufacturer's Symbol
Section 3.3.1 Testing of Thread Moulding Torque
Section 3.4.1 Testing of Drilling and Thread Moulding
Section 3.7 Testing of Tension Load Resistance section 4 bolts
Section 4.1 Dimensional Testing

SEP 1390 Weld bead bend test
1996-07

2 Macroscopic and Microscopic Investigations

DIN EN ISO 17639 Destructive tests on welds in metallic materials - Macroscopic and
2022-05 microscopic examination of welds

DIN EN 1321 Destructive tests of welds in metallic materials - Macroscopic and
1996-12 microscopic examination of welds

3 Testing of Coatings

3.1 Measurement of coating thickness

DIN EN ISO 1460 Metallic coatings - Hot dip galvanized coatings on ferrous materials
2020-12 - Gravimetric determination of the mass per unit area

DIN EN ISO 1463 Metallic and oxide coatings - Measurement of coating thickness -
2021-08 Microscopical method

DIN EN ISO 2178 Non-magnetic coatings on magnetic substrates - Measurement of
2016-11 coating thickness - Magnetic method

DIN EN 13523-1 Coil coated metals - Test methods - Part 1: Film thickness
2017-05

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3.2 Mechanical testing

DIN EN ISO 2409 2020-12	Paints and varnishes - Cross-cut test
DIN EN 10346 2015-10	Continuously hot-dip coated steel flat products for cold forming - Technical delivery conditions Section 8.5.5 Coating Mass
DIN EN 13523-6 2020-08	Coil coated metals - Test methods - Part 6: Adhesion after indentation (cupping test)
DIN EN 13523-7 2022-01	Coil coated metals - Test methods - Part 7: Resistance to cracking on bending (T-bend test)

3.3 Testing in artificial atmospheres

DIN EN ISO 6270-1 2018-04	Paints and varnishes - Determination of resistance to humidity - Part 1: Condensation (single-sided exposure)
DIN EN ISO 6270-2 2018-04	Paints and varnishes - Determination of resistance to humidity - Part 2: Condensation (in-cabinet exposure with heated water reservoir)
DIN EN ISO 6988 1997-03	Metallic and other non-organic coatings - Sulfur dioxide test with general condensation of moisture
DIN EN ISO 22479 2022-08	Corrosion of metals and alloys – Sulfur dioxide test in a humid atmosphere (fixed gas method)
DIN EN ISO 9227 2017-07	Corrosion tests in artificial atmospheres - Salt spray tests
DIN EN 13523-8 2017-10	Coil coated metals - Test methods - Part 8: Resistance to salt spray (fog)
DIN EN 13523-13 2014-08	Coil coated metals – Test methods – Part 13: Resistance to accelerated ageing by the use of heat
DIN EN 13523-23 2015-09	Coil coated metals – Test methods – Part 23: Resistance to humid atmospheres containing sulfur dioxide
DIN EN 13523-26 2022-04	Coil coated metals - Test methods - Part 26: Resistance to condensation of water

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DIN 50018
2013-05

Testing in a saturated atmosphere in the presence of sulphur
dioxide

Abbreviations used:

CUAP	Common Understanding Assessment Procedure
DIBt	Deutsches Institut für Bautechnik
DIN	Deutsches Institut für Normung e. V.
EN	European Standard
ISO	International Organization for Standardization
SEP	Stahl-Eisen-Prüfblatt (Steel-Iron Test Sheet)

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Accreditation



The Deutsche Akkreditierungsstelle attests with this **Partial Accreditation Certificate** that

Karlsruher Institut für Technologie

with its testing laboratory

Versuchsanstalt für Stahl, Holz und Steine Otto-Ammann-Platz 1, 76131 Karlsruhe

meets the requirements according to DIN EN ISO/IEC 17025:2018 for the conformity assessment activities listed in the annex to this certificate. This includes additional existing legal and normative requirements for the testing laboratory, including those in relevant sectoral schemes, provided they are explicitly confirmed in the annex to this certificate.

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

This accreditation was issued in accordance with Art. 5 Para. 1 Sentence 2 of Regulation (EC) 765/2008, after an accreditation procedure was carried out in compliance with the minimum requirements of DIN EN ISO/IEC 17011 and on the basis of a review and decision of the appointed accreditation committees.

This partial accreditation certificate only applies in connection with the notices of 27.09.2023 with accreditation number D-PL-11068-01.

It consists of this cover sheet, the reverse side of the cover sheet and the following annex with a total of 3 pages.

Registration number of the partial accreditation certificate: **D-PL-11068-01-03**

It is a part of the accreditation certificate D-PL-11068-01-00.

Berlin, 27.09.2023

Dipl.-Ing. Gabriel Zrenner
Head of Department

Translation issued:
27.09.2023

by proxy Tina Blas
Dipl.-Ing. Gabriel Zrenner
Head of Department

The certificate together with the annex 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 (www.dakks.de).

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See notes overleaf

Deutsche Akkreditierungsstelle GmbH

Office Berlin
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10117 Berlin

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

Office Braunschweig
Bundesallee 100
38116 Braunschweig

The Deutsche Akkreditierungsstelle GmbH (DAkkS) is the entrusted national accreditation body of the Federal Republic of Germany according to § 8 section 1 AkkStelleG in conjunction with § 1 section 1 AkkStelleGBV. DAkkS is designated as the national accreditation authority by Germany according to Art. 4 Para. 4 of Regulation (EC) 765/2008 and clause 4.7 of DIN EN ISO/IEC 17000.

Pursuant to Art. 11 section 2 of Regulation (EC) 765/2008, the accreditation certificate shall be recognised as equivalent by the national authorities within the scope of this Regulation as well as by the WTO member states that have committed themselves in bilateral or multilateral mutual agreements to recognise the certificates of accreditation bodies that are members of ILAC or IAF as equivalent.

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 Co-operation (ILAC).

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

Deutsche Akkreditierungsstelle

Annex to the Partial Accreditation Certificate D-PL-11068-01-03 according to DIN EN ISO/IEC 17025:2018

Valid from: 27.09.2023

Date of issue: 27.09.2023

This annex is a part of the accreditation certificate D-PL-11068-01-00.

Holder of partial accreditation certificate:

Karlsruher Institut für Technologie

with its testing laboratory

**Versuchsanstalt für Stahl, Holz und Steine
Otto-Ammann-Platz 1, 76131 Karlsruhe**

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 confirm generally with the principles of DIN EN ISO 9001.

Manual non-destructive testing (penetrant, magnetic particle testing and visual testing)

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

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>.

Annex to the Partial Accreditation Certificate D-PL-11068-01-03**1 Non-destructive testing****1.1 Penetrant testing**

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 EN 571-1 1997-03	Non-destructive testing - Penetrant testing - Part 1: General principles (here: <i>section 8</i>)
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

1.2 Magnetic particle testing

DIN EN ISO 9934-1 2017-03	Non-destructive testing - Magnetic particle testing - Part 1: General principles (here: <i>section 7-14</i>)
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
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

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Annex to the Partial Accreditation Certificate D-PL-11068-01-03**1.3 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 (here: section 5 and 6)

Abbreviations used:

DIN	Deutsches Institut für Normung e. V.
EN	European Standard
IEC	International Electrotechnical Commission
ISO	International Organisation for Standardisation