

Accreditation



The Deutsche Akkreditierungsstelle attests with this **Accreditation Certificate** that the inspection body Type A

Element Materials Technology Hamburg GmbH **Tempowerkring 11, 21079 Hamburg**

meets the minimum requirements according to DIN EN ISO/IEC 17020:2012 for the conformity assessment activities specified in more detail in the partial accreditation certificates listed below. This includes additional existing legal and normative requirements, including those in relevant sectoral schemes.

D-IS-11166-01-01

D-IS-11166-01-02

The management system requirements of DIN EN ISO/IEC 17020 are written in the language relevant to the operations of inspection bodies 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-IS-11166-01-00**

Berlin, 10.01.2023

Ralf Egner
Head of Department

Translation issued:
24.01.2023



Ralf Egner
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-IS-11166-01-00 according to DIN EN ISO/IEC 17020:2012

Valid from: **10.01.2023**

Date of issue: **24.01.2023**

Holder of accreditation certificate:

Element Materials Technology Hamburg GmbH
Tempowerkring 11, 21079 Hamburg

The inspection body Type A meets the minimal requirements of DIN EN ISO/IEC 17020:2012 and, where applicable, additional legal and normative requirements, including those in relevant sectoral schemes, in order to carry out the conformity assessment activities specified in the partial accreditation certificates listed below:

D-IS-11166-01-01

D-IS-11166-01-02

The management system requirements of DIN EN ISO/IEC 17020 are written in the language relevant to the operations of inspection bodies and confirm generally with 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>.

Accreditation



The Deutsche Akkreditierungsstelle attests with this **Partial Accreditation Certificate** that the inspection body Type A

Element Materials Technology Hamburg GmbH Tempowerkring 11, 21079 Hamburg

meets the minimum requirements according to DIN EN ISO/IEC 17020:2012 for the conformity assessment listed in the annex to this certificate. This includes additional existing legal and normative requirements, including those in relevant sectoral schemes.

The management system requirements of DIN EN ISO/IEC 17020 are written in the language relevant to the operations of inspection bodies 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 notice of 10.01.2023 with accreditation number D-IS-11166-01.

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-IS-11166-01-01**

It is a part of the accreditation certificate: D-IS-11166-01-00.

Berlin, 10.01.2023

Ralf Egner
Head of Department

Translation issued:
24.01.2023



Ralf Egner
Head of Department

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Deutsche Akkreditierungsstelle

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Valid from: 10.01.2023

Date of issue: 24.01.2023

This annex is a part of the accreditation certificate D-IS-11166-01-00.

Holder of partial accreditation certificate:

**Element Materials Technology Hamburg GmbH
Tempowerkring 11, 21079 Hamburg**

The inspection body Type A meets the minimal requirements of DIN EN ISO/IEC 17020:2012 and, if applicable, additional legal and normative requirements, including those in relevant sectoral schemes, in order to carry out the conformity assessment activities listed below.

The management system requirements of DIN EN ISO/IEC 17020 are written in the language relevant to the operations of inspection bodies and confirm generally with the principles of DIN EN ISO 9001.

Inspection in terms of failure analysis in materials engineering and condition examination regarding quality assurance of welding, corrosion protection as well as qualification of welding procedures and determination of their conformity with specific requirements or on the basis of professional judgment with general requirements

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-IS-11166-01-01

1 Welding

EHH-22-04D Quality assurance of welding work
Rev. 1
2022-10

EHH-22-02D Qualification of welding procedures
Rev. 0
2017-06

based on the following specifications:

DIN EN ISO 15614-1 Specification and qualification of welding procedures for metallic
2020-05 materials - Welding procedure test - Part 1: Arc and gas welding of
steels and arc welding of nickel and nickel alloys

DIN EN ISO 15614-2 Specification and qualification of welding procedures for metallic
2005-07 materials - Welding procedure test - Part 2: Arc welding of aluminium
and its alloys

DIN EN ISO 15614-3 Specification and qualification of welding procedures for metallic
2008-06 materials - Welding procedure test - Part 3: Fusion welding of non-
alloyed and low-alloyed cast irons

DIN EN ISO 15614-4 Specification and qualification of welding procedures for metallic
2005-09 materials - Welding procedure test - Part 4: Finishing welding of
aluminium castings

DIN EN ISO 15614-5 Specification and qualification of welding procedures for metallic
2004-07 materials - Welding procedure test - Part 5: Arc welding of titanium,
zirconium and their alloys

DIN EN ISO 15614-6 Specification and qualification of welding procedures for metallic
2007-01 materials - Welding procedure test - Part 6: Arc and gas welding of
copper and its alloys

DIN EN ISO 15614-7 Specification and qualification of welding procedures for metallic
2020-03 materials - Welding procedure test - Part 7: Overlay welding

DIN EN ISO 15614-8 Specification and qualification of welding procedures for metallic
2016-11 materials - Welding procedure test - Part 8: Welding of tubes to tube-
plate joints

Valid from: 10.01.2023
Date of issue: 24.01.2023

Annex to the Partial Accreditation Certificate D-IS-11166-01-01

DIN EN ISO 15614-11 2002-10	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 11: Electron and laser beam welding
DIN EN ISO 15613 2004-09	Specification and qualification of welding procedures for metallic materials - Qualification based on pre-production welding test
DIN EN ISO 14555 2017-10	Welding - Arc stud welding of metallic materials
DIN EN ISO 17660-1 2006-12	Welding - Welding of reinforcing steel - Part 1: Load-bearing welded joints
DIN EN ISO 17660-2 2006-12	Welding - Welding of reinforcing steel - Part 2: Non load-bearing welded joints

Abbreviations used:

DIN	German institute for standardisation
EHH	Element Materials Technology Hamburg GmbH
EN	European Standard
ISO	International Organisation for Standardisation

Accreditation



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Element Materials Technology Hamburg GmbH
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This partial accreditation certificate only applies in connection with the notice of 10.01.2023 with accreditation number D-IS-11166-01.
It consists of this cover sheet, the reverse side of the cover sheet and the following annex with a total of 5 pages.

Registration number of the partial accreditation certificate: **D-IS-11166-01-02**
It is a part of the accreditation certificate: D-IS-11166-01-00.

Berlin, 10.01.2023

Ralf Egnér
Head of Department

Translation issued:
24.01.2023



Ralf Egnér
Head of Department

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Valid from: 10.01.2023

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Holder of partial accreditation certificate:

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Tempowerkring 11, 21079 Hamburg

The inspection body Type A meets the minimal requirements of DIN EN ISO/IEC 17020:2012 and, if applicable, additional legal and normative requirements, including those in relevant sectoral schemes, in order to carry out the conformity assessment activities listed below.

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Annex to the Partial Accreditation Certificate D-IS-11166-01-02

DIN EN ISO 8502-4 2017-05	Preparation of steel substrates before application of paints and related products - Tests for the assessment of surface cleanliness - Part 4: Guidance on the estimation of the probability of condensation prior to paint application
DIN EN ISO 8502-6 2020-08	Preparation of steel substrates before application of paints and related products - Tests for the assessment of surface cleanliness - Part 6: Extraction of soluble contaminants for analysis - The Bresle method
DIN EN ISO 8503-2 2012-06	Preparation of steel substrates before application of paints and related products - Surface roughness characteristics of blast-cleaned steel substrates - Part 2: Method for the grading of surface profile of abrasive blast-cleaned steel - Comparator procedure
DIN EN ISO 1461 2009-10	Hot dip galvanized coatings on fabricated iron and steel articles - Specifications and test methods
DIN EN ISO 2178 2016-11	Non-magnetic coatings on magnetic substrates - Measurement of coating thickness - Magnetic method
DIN EN ISO 2360 2017-12	Non-conductive coatings on non-magnetic electrically conductive basis materials - Measurement of coating thickness - Amplitude-sensitive eddy current method
DIN EN ISO 2409 2020-12	Paints and varnishes - Cross-cut test
DIN EN ISO 2808 2019-12	Paints and varnishes - Determination of film thickness
DIN EN ISO 4624 2016-08	Paints and varnishes - Pull-off test for adhesion
DIN EN ISO 16276-1 2007-08	Corrosion protection of steel structures by protective paint systems - Assessment of, and acceptance criteria for, the adhesion/cohesion (fracture strength) of a coating - Part 1: Pull-off testing
DIN EN ISO 16276-2 2007-08	Corrosion protection of steel structures by protective paint systems - Assessment of, and acceptance criteria for, the adhesion/cohesion (fracture strength) of a coating - Part 2: Cross-cut testing and X-cut testing

Valid from: 10.01.2023

Date of issue: 24.01.2023

Annex to the Partial Accreditation Certificate D-IS-11166-01-02

ISO 19840
2012-09
Paints and varnishes - Corrosion protection of steel structures by protective paint systems - Measurement of, and acceptance criteria for, the thickness of dry films on rough surfaces

2 Failure analysis

EHH-22-01D
Rev. 0
2017-06
Processing of failure analysis

based on the following specifications:

VDI 3822
2011-11
Failure analysis - Fundamentals and performance of failure analysis

VDI 3822
Sheet 1.2
2017-12
Failure analysis - Failures in metal products from corrosion in aqueous media

VDI 3822
Sheet 1.3
2017-06
Failure analysis - Failures on metal products caused by tribology working conditions

VDI 3822
Sheet 1.4
2011-10
Failure analysis - Failures caused by thermal loading

VDI 3822
Sheet 1.6
2019-06
Failure analysis - Liquid metal induced crack growth by hot dip galvanising

VDI 3822
Sheet 2
2008-04
Failure analysis - Failures caused by mechanical working conditions

Annex to the Partial Accreditation Certificate D-IS-11166-01-02

Abbreviations used:

DIN	German Institute for Standardisation
EHH	Element Materials Technology Hamburg GmbH
EN	European Standard
ISO	International Organisation for Standardisation
VDI	Association of German Engineers

Valid from: 10.01.2023
Date of issue: 24.01.2023