

Accreditation



The Deutsche Akkreditierungsstelle attests with this **Accreditation Certificate** that the testing laboratory

Outokumpu Nirosta GmbH
Oberschlesienstraße 16, 47807 Krefeld

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 they conform to 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 only applies in connection with the notices of 07.10.2024 with accreditation number D-PL-17360-01.

It consists of this cover sheet, the reverse side of the cover sheet and the following annex with a total of 6 pages.

Registration number of the accreditation certificate: **D-PL-17360-01-00**

Berlin, 07.10.2024

Dr.-Ing. Tobias Poeste
Head of Technical Unit

Translation issued:
28.04.2025



Dr.-Ing. Tobias Poeste
Head of Technical Unit

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

Annex to the Accreditation Certificate D-PL-17360-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 07.10.2024

Date of issue: 28.04.2025

Holder of accreditation certificate:

Outokumpu Nirosta GmbH
Oberschlesienstraße 16, 47807 Krefeld

with the location

Outokumpu Nirosta GmbH
Oberschlesienstraße 16, 47807 Krefeld

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

Annex to the Accreditation Certificate D-PL-17360-01-00

Tests in the fields:

Spark emission spectrometry of steel and ferrous materials; Mechanical-technological testing of steels and surface tests; Chemical and metallographic testing of steels; Corrosion testing of metallic materials;

Within the scope of accreditation marked with *, 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 procedures within the flexible scope of accreditation.

1 Spark emission spectrometry

OTK factory specification BAE-WI-KR-RD-1305_de 2022-12	Determination of C, Si, Mn, P, S, Cr, Mo, Ni, V, W, Co, Cu, Sn, Al, B, As, Ti, Nb, Pb, Sb at steels by emission spectrometric analysis
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2 Material behaviour under mechanical stress *

ISO 7668 2018-02	Anodizing of aluminium and its alloys – Measurement of specular reflectance and specular gloss of anodic oxidation coatings at angles of 20 degrees, 45 degrees, 60 degrees or 85 degrees
ISO 10113 2006-09	Metallic materials – Sheet and strip – Determination of plastic strain ratio
DIN EN ISO 4288 1998-04	Geometrical Product Specifications (GPS) – Surface texture: Profile method – Rules and procedures for the assessment of surface texture
DIN EN ISO 6507-1 2006-03	Metallic materials – Vickers hardness test – Part 1: Test method
DIN EN ISO 6508-1 2016-12	Metallic materials – Rockwell hardness test – Part 1: Test method
DIN EN ISO 6892-1 2017-02	Metallic materials – Tensile testing – Part 1: Method of test at room temperature

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4 Corrosion testing

4.1 General corrosion tests *

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 9227 2017-07	Corrosion tests in artificial atmospheres – Salt spray tests
DIN 50905-1 2009-09	Corrosion of metals – Corrosion testing – Part 1: General guidance
DIN 50905-2 1987-01	Corrosion of metals; corrosion testing; corrosion characteristics under uniform corrosion attack
DIN 50905-3 1987-01	Corrosion of metals; corrosion testing; corrosion characteristics under nonuniform and localized corrosion attack without mechanical stress
DIN 50905-4 1987-01	Corrosion of metals; corrosion testing; corrosion testing in liquids under laboratory conditions without mechanical stress
ASTM B 117 2018	Standard Practice for Operating Salt Spray (Fog) Apparatus
ASTM B 368 2009	Standard Method for Copper-Accelerated Acetic Acid-Salt Spray (Fog) Testing (CASS Test)
ASTM G 85 2011	Standard Practice for Modified Salt Spray (Fog) Testing

4.2 Special corrosion tests on ferrous materials *

ISO 3651-3 2017-05	Determination of resistance to intergranular corrosion of stainless steels – Part 3: Corrosion test for low-Cr ferritic stainless steels
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
ASTM A 923 2014	Standard Test Methods for Detecting Detrimental Intermetallic Phase in Wrought Duplex Austenitic/Ferritic Stainless Steels
ASTM A 262 2015	Standard Practices for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels
ASTM G 28 2002	Standard Test Methods of Detecting Susceptibility to Inter-granular Corrosion in Wrought, Nickel-Rich, Chromium-Bearing Alloys
ASTM G 48 2011	Standard Test Methods for Pitting and Crevice Corrosion Resistance of Stainless Steels and related Alloys by Use of Ferritic Chloride Solution
ASTM G 150 2013	Standard Test Method for Electrochemical Critical Pitting Temperature Testing of Stainless Steels
SEP 1877 1994-07	Test of the resistance of high-alloy, corrosion-proof materials against intercrystalline corrosion

4.3 Testing of inorganic coatings *

DIN EN ISO 10289 2001-04	Methods for corrosion testing of metallic and other inorganic coatings on metallic substrates – Rating of test specimens and manufactured articles subjected to corrosion tests
VDA-Prüfblatt 621-415 1982-02	Test of the corrosion protection of motor vehicles under cyclically changing loads

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4.4 Corrosion tests of general importance *

DIN 50918 2018-09	Corrosion of metals – Electrochemical corrosion tests
ASTM G 5 2014	Standard Reference Test Method for Making Potentiostatic and Potentiodynamic Anodic Polarization Measurements
ASTM G 36 1994	Standard Practice for Evaluating Stress-Corrosion; Cracking Resistance of Metals and Alloys in a Boiling Magnesium Chloride Solution

Abbreviations used:

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-iron test sheet
VDA	Association of the German Automotive Industry
ONR-RHG	In-house method of Outokumpu Nirosta GmbH
OTK	In-house method of Outokumpu Nirosta GmbH