

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

Horn & Co. Analytics GmbH
Buderusstraße 25, 35576 Wetzlar

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

physico-chemical and chemical analysis of steels and slags

The accreditation certificate shall only apply in connection with the notice of accreditation of June 7, 2022 with the accreditation number D-PL-14055-01. It comprises the cover sheet, the reverse side of the cover sheet and the following annex with a total of 3 pages.

Registration number of the certificate: **D-PL-14055-01-02**

Berlin,
June 7, 2022

Dipl.-Biol. Uwe Zimmermann
Head of Department

Translation issued:
November 9, 2022



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 at <https://www.dakks.de/en/accredited-bodies-search.html>.

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

See notes overleaf.

Deutsche Akkreditierungsstelle GmbH

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The publication of extracts of the accreditation certificate is subject to the prior written approval by Deutsche Akkreditierungsstelle GmbH (DAkKS). Exempted is the unchanged form of separate disseminations of the cover sheet by the conformity assessment body mentioned overleaf.

No impression shall be made that the accreditation also extends to fields beyond the scope of accreditation attested by DAkKS.

The accreditation was granted pursuant to the Act on the Accreditation Body (AkkStelleG) and the Regulation (EC) No 765/2008 of the European Parliament and of the Council setting out the requirements for accreditation and market surveillance relating to the marketing of products. 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 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

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-14055-01-02 according to DIN EN ISO/IEC 17025:2018

Valid from: June 7, 2022

Date of issue: June 7, 2022

Holder of certificate:

Horn & Co. Analytics GmbH
Buderusstraße 25, 35576 Wetzlar

Tests in the fields:

physico-chemical and chemical analysis of steels and slags

The testing laboratory is permitted to apply the listed standardised or equivalent test methods with different versions of the standards without obtaining prior notification and consent from DAkkS.

The testing laboratory has an up-to-date list of all test methods within the flexible scope of accreditation.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories. Laboratories that conform to the requirements of this standard, operate generally in accordance with the principles of DIN EN ISO 9001.

*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 at <https://www.dakks.de/en/content/accredited-bodies-dakks>.*

Abbreviations used: see last page

Page 1 of 3

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

1 Analysis of steels

DIN EN ISO 15350 2010-08	Steel and iron – Determination of total carbon and sulphur content – Infrared absorption method after combustion in an induction furnace (routine method)
DIN EN ISO 15351 2010-08	Steel and iron – Determination of nitrogen content – Thermal conductimetric method after fusion in a current of inert gas (routine method)
DIN EN 10276-1 2000-08	Chemical analysis of ferrous materials – Determination of oxygen in steel and iron – Part 1: Sampling and preparation of steel samples for oxygen determination
DIN EN 10276-2 2003-10	Chemical analysis of ferrous materials – Determination of oxygen in steel and iron – Part 2: Infrared method after fusion under inert gas
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
ASTM E 415 2021	Standard Test Method for Analysis of Carbon and Low-Alloy Steel by Spark Atomic Emission Spectrometry
ASTM E 1086 2014	Standard Test Method for Analysis of Austenitic Stainless Steel by Spark Atomic Emission Spectrometry
Handbuch für das Eisen- hüttenlaboratorium, Volume 2, Part 2, 2nd Ed. 1998, p. 116 1985-01	Determination of total carbon and sulphur content of steel – Method using infrared atomic absorption spectroscopy
Handbuch für das Eisen- hüttenlaboratorium, Volume 2, Part 2, 2nd Ed. 1998, p. 235 1989-08	Determination of hydrogen in steel by hot extraction – Carrier gas method, thermal conductivity
Handbuch für das Eisen- hüttenlaboratorium, Volume 2, Part 2, 2nd Ed. 1998, p. 192 1986-11	Analysis of ferrochromium after sample preparation by metal remelting – X-ray fluorescence spectrometric determination of the elements silicon, manganese, phosphorus, chromium, nickel, vanadium and cobalt in ferrochromium
AA-HuK-192 2021-12	Determination of the composition of steel as a combined test method using XRF and spark OES

2 Analysis of slags

DIN 51001
Supplementary sheet 1
2010-05

Testing of oxidic raw materials and basic materials – General bases of work for X-Ray fluorescence method (XRF) – General survey on disintegration methods referred to groups of materials for the determination of test specimens for XRF

Abbreviations used:

AA-HuK-xxx
ASTM
DIN

In-house method of Horn & Co. Analytics GmbH
ASTM International, international standardisation organisation
Deutsches Institut für Normung e. V. (German Institute for Standardization)

EN
HfdE

European standard
Handbuch für das Eisenhüttenlaboratorium (Handbook for the Iron and Steel Laboratory)

IEC
ISO

International Electrotechnical Commission
International Organization for Standardization