

Deutsche Akkreditierungsstelle

Annex to the Partial Accreditation Certificate D-PL-11220-01-03 according to DIN EN ISO/IEC 17025:2018

Valid from: 04.04.2023

Date of issue: 04.04.2023

This annex is a part of the accreditation certificate D-PL-11220-01-00.

Holder of partial accreditation certificate:

**Materialprüfanstalt für das Bauwesen und Produktionstechnik
Nienburger Straße 3, 30167 Hannover**

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.

with the location:

An der Universität 2, 30823 Garbsen

Tests in the fields:

**Mechanical-technological and physical testing of plastics, metals, grinding wheels, saw blades and comparable products;
Analytical testing of gas and water products;**

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.

2. Analytical testing of gas and water products (G)

DIN EN 723 2009-07	Copper and copper alloys - Combustion method for determination of the carbon content on the inner surface of copper tubes or fittings
DIN EN 1057 2010-06	Copper and copper alloys - Seamless, round copper tubes for water and gas in sanitary and heating applications, <u>here:</u> section 10.2 and section 10.4
DIN EN 1254-1 1998-03	Copper and copper alloys - Plumbing fittings - Part 1: Capillary fittings for soldering or brazing to copper tubes, <u>here:</u> section 5.4.2
DVGW GW 8 2009-07	Copper fittings with ends for capillary soldering in gas and drinking water installations – Requirements and tests, <u>here:</u> section 5.4.2.1 in conjunction with Annex B B
DVGW GW 392 2015-04	Seamless drawn copper tubes for gas and drinking water installations and seamless copper tubes with internal tin plating for drinking water installations – Requirements and tests, <u>here:</u> section 4.1.3 and section 4.1.5 in conjunction with Annex A
RAL-GZ 641/1 2019-09	System copper tube – Special quality and test specifications for copper tubes, <u>here:</u> section 1-2.2 and section 1-7.2 in conjunction with Annex 1
RAL-GZ 641/3 2019-09	System copper tube – Special quality and test specifications for fittings with ends for capillary soldering made of copper tube, <u>here:</u> section 3-4.9.2
DVGW GW 335B2 2004-09	Plastic piping systems in gas and water supply – Requirements and tests – Part B 2: Fittings made of PE 80 and PE 100, <u>here:</u> section 5.2.1

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3. Analytical material testing (G)

ISO 760 1978-12	Determination of Water - Karl Fischer Method (General method) 7. Direct Electrometric Titration
DIN EN ISO 3452-2 2014-03	Non-destructive testing - Penetrant testing - Part 2: Testing of penetrant materials
DIN EN ISO 3452-3 2014-03	Non-destructive testing - Penetrant testing - Part 3: Reference test blocks (here: 5.2 Measurement)
ASME CODE T-641 2019	ASME Boiler und Pressure Vessel Code - Non-destructive Examination, Subsection a, Article 6 "Mandatory Appendices" Appendix II: Control of contaminations for liquid penetrant examination / II-641 Nickel Base Alloys
ASTM E 1135 2019	Standard Test Method for Comparing the Brightness of Fluorescent Penetrants 10. Procedure for the Model S 291
ASTM E 1417/E 1417M 2016-06	Standard Practice for Liquid Penetrant Testing 7.8.2.2 Penetrant Brightness 7.8.2.4 Water Content

Abbreviations used:

ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
DIN	Deutsches Institut für Normung e.V. - German institute for standardization
DVGW	Deutscher Verein des Gas- und Wasserfaches e. V. - German Association of the Gas and Water Industry
EN	Europäische Norm - European Standard
IEC	International Electrotechnical Commission
ISO	International Organization for Standardisation
RAL	Deutsches Institut für Gütesicherung und Kennzeichnung e. V. - German Institute for Quality Assurance and Labelling

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