DAkkS
Deutsche
Akkreditierungsstelle

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Annex to the Accreditation Certificate D-PL-21613-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: **19.12.2022**

Date of issue: 14.08.2023

Holder of accreditation certificate:

Universität Duisburg-Essen
Universitätsstraße 2, 45141 Essen

with its testing laboratory

Institut für Metall- und Leichtbau
Universitätsstraße 15, 45141 Essen

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.

mechanical-technological tests on materials and components made of metals, plastics and coated textiles; selected mechanical-technological tests on fasteners made of metal

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 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.

1 Mechanical-technological tests on metallic materials and bolting assemblies

1.1 Testing of mechanically joined fasteners

DIN EN 1090-2 2018-09	Execution of steel structures and aluminium structures - Part 2: Technical requirements for steel structures; (here: annex G, determination of static friction coefficient)
DIN EN 14399-2 2015-04	High-strength structural bolting assemblies for preloading - Part 2: Suitability for preloading; (here: section 6, suitability testing)
DIN EN ISO 16047 2013-01	Fasteners - Torque/clamp force testing (here: section 9, test under special conditions)

1.2 Tensile tests on metallic materials and fasteners

DIN EN ISO 6892-1 2020-06	Metallic materials - Tensile testing - Part 1: Method of test at room temperature (here: procedure B)
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 (here: section 9.2, Tensile test on finished bolts for the determination of tensile strength Rm section 9.7, Tensile test on turned samples)
DIN EN 15048-2 2016-09	Non-preloaded structural bolting assemblies - Part 2: Fitness for purpose; (here: section 6, tensile test to determine the breaking force of fittings for bolted assemblies)
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 (here: section 9.1, Tensile test for fasteners)

2 Mechanical-technological testing of plastics and textiles

DIN EN 17117-1 2019-02	Rubber or plastics-coated fabrics - Mechanical test methods under biaxial stress states - Part 1: Tensile stiffness properties;
DIN EN ISO 527-1 2019-12	Plastics - Determination of tensile properties - Part 1: General principles
DIN EN ISO 527-3 2019-02	Plastics - Determination of tensile properties - Part 3: Test conditions for films and sheets
DIN EN ISO 1421 2017-03	Rubber- or plastics-coated fabrics - Determination of tensile strength and elongation at break

Abbreviations used:

DIN	German institute for standardization
EN	European Standard
IEC	International Electrotechnical Commission
ISO	International Organization for Standardisation