

Deutsche Akkreditierungsstelle

Annex to the Partial Accreditation Certificate D-PL-11060-02-01 according to DIN EN ISO/IEC 17025:2018

Valid from: 05.05.2023

Date of issue: 05.05.2023

This annex is a part of the accreditation certificate D-PL-11060-02-00.

Holder of partial accreditation certificate:

DEKRA Automobil GmbH
Handwerkstraße 15, 70565 Stuttgart

with her testing laboratory

DEKRA Werkstofflabor
Untertürkheimer Straße 25, 66117 Saarbrücken

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 testing and metallographic testing of metallic materials; spectral analysis of low-alloy steels and aluminium alloys; mechanical-technological testing of plastics; environmental testing

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.

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Within the scope of accreditation marked *, the testing laboratory is permitted to apply the listed standardised or equivalent test methods with different versions 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.**

1 Mechanical-technological test methods on metallic materials ***

DIN EN ISO 15630-1 2019-05	Steel for the reinforcement and prestressing of concrete - Test methods - Part 1: Reinforcing bars, rods and wire <i>(here: Section 5, Tensile test and Section 8, Axial force fatigue test)</i>
DIN EN ISO 15630-2 2019-05	Steel for the reinforcement and prestressing of concrete - Test methods - Part 2: Welded fabric <i>(here: only Section 5, Tensile test)</i>
DIN 50100 2016-12	Testing of Materials; Continuous Vibration Test; Definitions, Symbols, Procedure, Evaluation <i>(here: Sections 1-6, continuous vibration tests in the tension and compression pulsation range and alternating range)</i>
DIN 50106 2016-11	Testing of metallic materials - Compression test
DIN EN ISO 6892-1 2020-06	Metallic materials - Tensile testing - Part 1: Method of test at room temperature
DIN EN ISO 148-1 2017-05	Metallic materials - Charpy pendulum impact test - Part 1: Test methods
DIN EN ISO 9016 2022-07	Destructive tests on welds in metallic materials - Impact tests - Test specimen location, notch orientation and examination
DIN EN ISO 5173 2012-02	Destructive tests on welds in metallic materials - Bend tests
DIN EN ISO 4136 2022-09	Destructive tests on welds in metallic materials - Transverse tensile test
DIN EN ISO 7438 2021-03	Metallic materials - Bend test

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DIN EN ISO 8492 2014-03	Metallic materials - Tube - Flattening test
DIN EN ISO 8493 2004-10	Metallic materials - Tube - Drift-expanding test
DIN 50141 1982-01	Testing of metals; Shear test
DIN EN ISO 6506-1 2015-07	Metallic materials - Brinell hardness test - Part 1: Test method
DIN EN ISO 6507-1 2018-07	Metallic materials - Vickers hardness test - Part 1: Test method
DIN EN ISO 6508-1 2016-12	Metallic materials - Rockwell hardness test - Part 1: Test methods (here: <i>scale C</i>)
DIN EN ISO 14271 2018-01	Resistance welding - Vickers hardness testing (low-force and micro-hardness) of resistance spot, projection, and seam welds
DIN EN ISO 9015-1 2011-05	Destructive tests on welds in metallic materials - Hardness testing - Part 1: Hardness test on arc welded joints
DIN EN ISO 2639 2003-04	Steels - Determination and verification of the depth of carburized and hardened cases
DIN EN 10328 2005-04	Iron and steel - Determination of the conventional depth of hardening after surface heating
DIN 50190-3 1979-03	Hardness depth of heat-treated parts - Determination of the effective depth of hardening after nitriding
EAD 16129-00-0301 2020-01	Couplers for mechanical splices of reinforcing steel bars

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2 Metallographic test methods on metallic materials ***

DIN EN ISO 3887 2018-05	Steels - Determination of depth of decarburization
DIN EN ISO 643 2020-06	Steels - Micrographic determination of the apparent grain size
ASTM E 112 2013	Standard Test Methods for Determining Average Grain Size
DIN 50602 1985-09	Metallographic examination - Microscopic examination of special steels using standard diagrams to assess the content of non-metallic inclusions
DIN EN 10247 2017-09	Micrographic examination of the non-metallic inclusion content of steels using standard pictures
DIN EN ISO 1463 2021-08	Metallic and oxide coatings - Measurement of coating thickness - Microscopical method

3 Spectral analysis of low-alloy steels and aluminium alloys

QMA-182 2021-08	Optical spark emission spectrometry (OES) for the determination of 14 elements in steel and iron materials and 11 elements in aluminium base alloys
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4 Determination of material properties of plastics ***

ISO 16012 2015-03	Plastics - Determination of linear dimensions of test specimens
DIN 53508 2000-03	Testing of rubber - Accelerated ageing
DIN 53504 2017-03	Testing of rubber - Determination of tensile strength at break, tensile stress at yield, elongation at break and stress values in a tensile test
DIN EN ISO 527-1 2012-06	Plastics - Determination of tensile properties - Part 1: General principles
DIN EN ISO 527-2 1996-07	Plastics - Determination of tensile properties - Part 2: Test conditions for moulding and extrusion plastics

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DIN EN ISO 527-3 2019-02	Plastics - Determination of tensile properties - Part 3: Test conditions for films and sheets
DIN EN ISO 527-4 1997-07	Plastics - Determination of tensile properties - Part 4: Test conditions for isotropic and anisotropic fibre-reinforced plastic composites
DIN EN ISO 527-5 2010-01	Plastics - Determination of tensile properties - Part 5: Test conditions for unidirectional fibre-reinforced plastic composites
DIN ISO 34-1 2004-07 + Corrigendum 1 2005-07	Rubber, vulcanized or thermoplastic - Determination of tear strength - Part 1: Trouser, angle and crescent test pieces
DIN 7864-1 1984-04	Sheets of elastomers for waterproofing; terms of delivery (Restriction: <i>Without sections 5.14 / 5.15 / 5.19 / 5.20.7</i>)
DIN EN ISO 868 2003-10	Plastics and ebonite - Determination of indentation hardness by means of a durometer (Shore hardness)
DIN EN ISO 179-1 2010-11	Plastics - Determination of Charpy impact properties - Part 1: Non-instrumented impact test
DIN EN ISO 1183-1 2013-04	Plastics - Methods for determining the density of non-cellular plastics - Part 1: Immersion method, liquid pycnometer method and titration method
DIN EN ISO 11357-1 2017-02	Plastics - Differential scanning calorimetry (DSC) - Part 1: Noise control strategies
DIN EN ISO 11358-1 2014-10	Plastics - Thermogravimetry (TG) of polymers - General principles
DIN ISO 4593 2019-06	Testing of plastics films - Determination of the thickness by mechanical scanning
ISO 4593 1993-11	Plastics - Film and sheeting - Determination of thickness by mechanical scanning

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5 FTIR analysis of polymeric workpieces

QMA-105 2017-11	FTIR analysis (Fourier transform infrared spectrometer) on polymer workpieces and samples
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6 Environmental testing in accordance with standardised or equivalent test methods ***

DIN EN ISO 1460 1995-01	Gravimetric determination of the mass per unit area of zinc coatings on ferrous materials
DIN EN ISO 9227 2017-07	Corrosion tests in artificial atmospheres - Salt spray tests
DIN EN ISO 11997-1 2006-04	Paints and varnishes - Determination of resistance to cyclic corrosion conditions - Part 1: Wet (salt fog)/dry/humid (cycle B)
DIN EN ISO 6270-2 2018-04	Paints and varnishes - Determination of resistance to humidity - Part 2: Procedure for exposing test specimens in condensation-water atmospheres
DIN EN ISO 4892-2 2013-06	Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps
DIN EN ISO 105-B06 2004-07	Textiles - Tests for colour fastness - Part B06: Colour fastness and ageing to artificial light at high temperatures: Xenon arc fading lamp test
DIN 74069 2016-05	Retro-reflective registration plates for motor vehicles and their trailers (here: <i>Except Section 6.4.3 Testing of coefficients of retro-reflectivity</i>)
DIN EN 14350-1 2004-11	Child use and care articles - Drinking equipment - Part 1: General and mechanical requirements and tests (Here: <i>Section 5.2 to 5.10</i>)
DIN EN ISO 2409 2013-06	Paints and varnishes - Cross-cut test
ISO 7591 1982-12	Road vehicles - Retro-reflective registration plates for motor vehicles and trailers - Specification
VDA 75202 2001-08	Trim materials in the interior of automobiles - Colour fastness test and ageing behaviour against light at high temperatures - Xenon arc light

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250 - ECE R 19 (2014) 2016-05-11	Uniform provisions concerning the approval of power-driven vehicle front fog lamps - Annex 6, paragraph 2.2.1 in conjunction with 2.2.3.1
251 - ECE R 98 (2013) 2016-05-11	Uniform provisions concerning the approval of motor vehicle head-lamps equipped with gas-discharge light sources - Annex 5, paragraph 2.2.1 in conjunction with 2.2.3.1
252 - ECE R 112 (2013) 2016-05-11	Uniform provisions concerning the approval of motor vehicle head-lamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or LED modules - Annex 6, paragraph 2.2.1 in conjunction with 2.2.3.1
253 - ECE R 113 (2014) 2016-05-11	Uniform provisions concerning the approval of motor vehicle head-lamps emitting a symmetrical passing beam or a driving beam or both and equipped with filament, gas-discharge light sources or LED modules - Annex 6, paragraph 2.2.1 in conjunction with 2.2.3.1
254 - ECE R 123 (2010) 2016-05-11	Uniform provisions concerning the approval of adaptive front-lighting systems (AFS) for motor vehicles - Annex 6, paragraph 2.2.1 in conjunction with 2.2.3.1

7 Environmental testing in accordance with company standards or in-house methods

PV 3929 2008-03	Non-metallic materials - Weathering in dry and warm climates
PV 3930 2008-03	Non-metallic materials - Weathering in humid and warm climates
PV 1200 2004-10	Vehicle components - Climatic resistance test (+ 80/-40) °C
PV 1303 2001-03	Non-metallic materials - Exposure test for components of the vehicle interior
QMA-210 2010-05	Climatic resistance test of polymer and/or metallic materials - Test specification no. 10.1

Abbreviations used:

DIN	Deutsches Institut für Normung e.V. (German Institute for Standardisation)
ECE	Economic Commission for Europe
EN	European Standard
IEC	International Electrotechnical Commission
ISO	International Organisation for Standardisation
PV	Volkswagen AG company standard
QMA	In-house method of DEKRA Automobil GmbH
VDA	Verband der Automobilindustrie (Association of the German automotive industry)