Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-11061-03-00 according to DIN EN ISO/IEC 17025:2018

Valid from: **25.11.2021**

Date of issue: 26.02.2024

Holder of certificate:

EDAG Engineering GmbH
Kreuzberger Ring 40, 65205 Wiesbaden

With its testing laboratories at the locations:

Weimarer Straße 14, 80807 München
Am Nordring 32, 80807 München
Christine-Englerth-Straße 32, 45665 Recklinghausen

Tests in the fields:

Environmental simulation in the areas temperature, humidity, solar simulation, vibration and mechanical shock as well as in their combination on technical products; geometric deformation analysis of components using 3D measurement technology; investigations into passive vehicle safety in the area of airbags under climatic conditions (static deployment tests); hydraulic tests; salt spray tests; dynamic component tests; fatigue testing; quasi-static tests using a material testing machine; tests on airflow components.

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

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

Within the given testing field marked with *), the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the free choice of standard or equivalent testing methods.
The listed testing methods are exemplary. The testing laboratory maintains a current list of all testing methods within the flexible scope of accreditation.

The test areas are marked with the following symbols of the locations at which the test procedures from these are carried out:

(W) = Weimarer Straße (N) = Am Nordring (R) = Christine-Englerth-Straße

1 Environmental simulation in the areas temperature, humidity, solar simulation, salt spray test, vibration and mechanical shock as well as their combination on technical products *

(W)

DIN EN 60068-2-1 2008-01	Environmental testing - Part 2-1: Tests - Test A: Cold (IEC 60068-2-1:2007)
DIN EN 60068-2-2 2008-05	Environmental testing - Part 2-2: Tests - Test B: Dry heat (IEC 60068-2-2:2007)
DIN EN 60068-2-6 2008-10	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal) (IEC 60068-2-6:2007)
DIN EN 60068-2-14 2010-04	Environmental testing - Part 2-14: Tests - Test N: Change of temperature (IEC 60068-2-14:2009)
DIN EN 60068-2-27 2010-02	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock (IEC 60068-2-27:2008)
DIN EN 60068-2-30 2006-06	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle) (IEC 60068-2-30:2005)
DIN EN 60068-2-38 2010-06	Environmental testing - Part 2-38: Tests - Test Z/AD: Composite temperature/humidity cyclic test (IEC 60068-2-38:2021)
DIN EN 60068-2-52 2018-08	Environmental testing - Part 2-52: Tests - Test Kb: Salt mist, cyclic (sodium chloride solution) (IEC 60068-2-52:2017)
DIN EN 60068-2-53 2011-02	Environmental testing - Part 2-53: Tests and guidance: Combined climatic (temperature/humidity) and dynamic (vibration/shock) tests (IEC 60068-2-53:2010)
DIN EN 60068-2-64 2009-04	Environmental testing - Part 2-64: Tests - Test Fh: Vibration, broadband random and guidance (IEC 60068-2-64:2008 + A1:2019)
DIN 75220 1992-11	Aging of vehicle components in solar simulation systems
DIN EN ISO 9227 2017-07	Corrosion tests in artificial atmospheres - Salt spray tests (ISO 9227:2022) (here: only NSS tests)

2 Environmental simulation, vibration and climatic tests as well as hydraulic and fatigue testing according to further test methods

(W)

PR 303.5 2010-01	Climate change test for trim parts
PR 306.5 2014-04	Solar simulation for trim parts
PR 308.2 2006-04	Climatic testing of adhesive connections and material connections on trim parts
PR 309.2 2016-03	Vibration test for trim components
PV 2005 2000-09	Vehicle parts - testing of resistance to climate change
PV 1200 2004-10	Vehicle parts - testing of resistance to climate change (80 °C / -40 °C)
SAE J2334 2016-04	Laboratory Cyclic Corrosion Test
VG VM-202 2020-09	Hydraulic tests on pipes, hoses and their connections with climate and movement overlay

3 Tensile strength tests on metallic materials and plastics ***

(W)

DIN EN ISO 6892-1 2017-02	Metallic materials - Tensile testing - Part 1: Method of test at room temperature (ISO 6892-1:2016) (here: Method *B*)
DIN EN ISO 527-1 2019-12	Plastics - Determination of tensile properties - Part 1: General principles (ISO 527-1:2019) (here: Section *9*)

4 Quasi-static tests with a tension-compression testing machine

(W)

AA-VM-014 2019-02	Quasi-static tests with a tension-compression testing machine

5 Vibration resistance tests for metallic material samples and components ***

(W)

DIN 50100 2016-12	Load controlled fatigue testing - Execution and evaluation of cyclic tests at constant load amplitudes on metallic specimens and components

6 Testing of airbag modules ***

(N)

ISO 12097-2 1996-08	Road vehicles - Airbag components - Part 2: Testing of airbag modules (here: chapter *6.1: Static deployment test*)

7 Testing of airbag modules according to automobile manufacturer specifications

(N)

VW 82511 2010-11	Airbag-System - Airbag-Module (Installation location: steering wheel, instrument panel) - requirements and test conditions (here: *5 - Static deployment test* *8.2 - Mechanical shock test* *8.4 - Vibration exposure with temperature* *8.5 - Climate change test* *8.6 - Salt spray test* *8.7 – Solar simulation*)

VW 82514 2010-11	Airbag-System - Airbag-Module (Installation location: doors) - requirements and test conditions (here: *5 - Static deployment test* *8.2 - Mechanical shock test* *8.4 - Vibration exposure with temperature* *8.5 - Climate change test* *8.6 - Salt spray test* *8.7 – Solar simulation*)
VW 82517 2010-11	Airbag-System - Airbag-Module (Installation location: seats) - requirements and test conditions (here: *5 - Static deployment test* *8.2.2 - Mechanical shock test* *8.2.4 - Vibration exposure with temperature* *8.2.5 - Climate change test* *8.2.6 - Salt spray test*)
VW 82533 2010-11	Airbag-System - Head impact protection-airbag-module (Installation location: roof frame) - requirements and test conditions (here: *5 - Static deployment test* *8.3.7 - Salt spray test*)

8 Optical deformation analysis of components using 3D measurement technology

(W)

AA-VM-005 2021-05	Optical deformation analysis of components using photogrammetry (GOM-Tritop)
AA-VM-006 2021-07	Optical deformation analysis of components using High-Speed-Photogrammetry

9 Volume flow tests on ventilation components

(R)

Porsche 01.02.34 2014-08	Test specification for bodywork equipment – air nozzle (here: Part 02 - Function)
EP 87 500.25 2011-06	Air flow system (Heating system and air ducts) - leak test

10 Dynamic component tests

(W)

VG-VM-203 2020-11	Conduction of dynamic component tests (FGS)
UN-R127-02 2018-05	Uniform provisions concerning the approval of motor vehicles with regard to their pedestrian safety performance
Euro NCAP 2018-10	European new car assessment programme Pedestrian - Testing Protocol

Abbreviation used:

DIN	German institute for standardization
EN	European Standard
EP	Volkswagen AG Group Standard
Euro NCAP	European New Car Assessment Programme
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
PV	Volkswagen AG Group Standard
PR	BMW Group Standard
SAE	Society of Automotive Engineers
UN-R	UN-Regulation
VW	Volkswagen AG Group Standard
VG-VM	EDAG Engineering GmbH procedural instructions
AA-VM	EDAG Engineering GmbH work instructions