ANNEX A:

Following standards are included within the flexible scope of accreditation category A according to DAkkS rule „R-17025-PL (7.8.4 / page 6)“.

- Materialography (MAT) – Annex 11108-01-01:

1.1 Hardness Testing [Flex A]

DIN EN ISO 18203 2022-07	Steel - Determination of the thickness of surface-hardened layers
DIN EN ISO 6507-1 2024-01	Metallic materials - Vickers hardness test - Part 1: Test method
DIN EN ISO 6506-1 2015-02	Metallic materials - Brinell hardness test - Part 1: Test method [1]
DIN EN ISO 2639 2003-04	Steels - Determination and verification of the depth of carburized and hardened cases

1.2 Weld Seam Analysis [Flex A]

DIN EN ISO 9015-2 2016-10	Destructive tests on welds in metallic materials - Hardness testing - Part 2: Microhardness testing of welded joints
DIN EN ISO 17639 2022-05	Destructive tests on welds in metallic materials – Macroscopic and microscopic examination of welds

1.3 Microscopic Examinations [Flex A]

DIN 30901 2016-12	Heat treatment of ferrous materials - Determination of the depth and form of appearance of the internal oxidation
DIN EN ISO 643 2024-12	Steels - Micrographic determination of the apparent grain size
DIN EN ISO 1463 2021-08	Metallic and oxide coatings - Measurement of coating thickness - Microscopical method

[1] Chapter 7, Table 2 – only testing procedure HBW 2,5 / 62,5

ANNEX A (continuation):

Following standards are included within the flexible scope of accreditation category A according to DAkkS rule „R-17025-PL (7.8.4)“.

- Chemical Analysis (CHA) – Annex 11108-01-01:

2.1 Thermal Analysis of Plastics [Flex A]

DIN EN ISO 11358-1 2022-07	Plastics - Thermogravimetry (TG) of polymers - Part 1: General principles
DIN EN ISO 11357-2 2020-08	Plastics - Differential scanning calorimetry (DSC) - Part 2: Determination of glass transition temperature and step height
DIN EN ISO 11357-3 2025-09	Plastics - Differential scanning calorimetry (DSC) - Part 3: Determination of temperature and enthalpy of melting and crystallization

2.2 Investigation of Chemicals, Raw Materials, Materials and Residues, Deposits and unknown Substances [Flex A]

DIN ISO 22309 2015-11	Microbeam analysis - Quantitative analysis using energy-dispersive spectrometry (EDS) for elements with an atomic number of 11 (Na) or above
VDA 19 2004	Inspection of Technical Cleanliness – Particulate Contamination of Functionally Relevant Automotive Components [2]
VDA 19 Part 1 2015	Inspection of Technical Cleanliness – Particulate Contamination of Functionally Relevant Automotive Components [3]
ISO 16232 2018-12	Road vehicles - Cleanliness of components and systems [4]
ISO 16232-7 2007-06	Road vehicles - Cleanliness of components and systems - Part 7: Particle sizing and counting by microscopic analysis

[2] Chapter F.3 and F.4 SEM/EDX
[3] Chapter 8.3.2 SEM/EDX, 8.3.4 Raman spectroscopy and 8.3.5 IR (infrared spectroscopy)
[4] Chapter 9.3.1, 9.3.2 SEM/EDX, 9.3.4 Raman spectroscopy and 9.3.5 IR (infrared spectroscopy)

ANNEX A (continuation):

Following standards are included within the flexible scope of accreditation category A according to DAkkS rule „R-17025-PL (7.8.4)“.

ISO 16232-8 2007-06	Road vehicles - Cleanliness of components and systems - Part 8: Particle nature determination by microscopic analysis
Ph.Eur.11.8 2.2.24 2026-01	Investigation or identification of unknown substances in organic and inorganic materials by means of Fourier transform infrared spectroscopy (FTIR)

3 Determination of the water content in Plastics [Flex A]

DIN EN ISO 15512 2019-09	Plastics - Determination of water content [5]

- Technical Cleanliness (TecSa) – Annex 11108-01-02:

1 Determining the cleanliness of components for fluid systems [Flex A]

ISO 4405 2022-07	Hydraulic fluid power - Fluid contamination - Determination of particulate contamination by the gravimentric method
ISO 4407 2002-04	Hydraulic fluid power - Fluid contamination - Determination of particulate contamination by the counting method using an optical microscope

2 Determination of particle contamination on functionally relevant automotive components [Flex A]

VDA 19 2004	Inspection of Technical Cleanliness – Particulate Contamination of Functionally Relevant Automotive Components [6]
VDA 19 Part 1 2015	Inspection of Technical Cleanliness – Particulate Contamination of Functionally Relevant Automotive Components [7]

[5] Chapter 6, Procedure B2 - Water evaporation using a heated sample vial (coulometric)
[6] Chapter D, E, F.1 to F.4
[7] except chapter 8.3.3 LIBS, 8.3.6 X-ray microtomography and 8.4 Shortened analysis

ANNEX A (continuation):

Following standards are included within the flexible scope of accreditation category A according to DAkkS rule „R-17025-PL (7.8.4)“.

3 Determination of particle contamination of components and systems [Flex A]

ISO 16232 2018-12	Road vehicles - Cleanliness of components and systems [8]
ISO 16232-2 2007-06	Road vehicles - Cleanliness of components of fluid circuits Part 2: Method of extraction of contaminants by agitation
ISO 16232-3 2007-06	Road vehicles - Cleanliness of components of fluid circuits Part 3: Method of extraction of contaminants by pressure rinsing
ISO 16232-4 2007-06	Road vehicles - Cleanliness of components of fluid circuits Part 4: Method of extraction of contaminants by ultrasonic techniques
ISO 16232-5 2007-06	Road vehicles - Cleanliness of components of fluid circuits Part 5: Method of extraction of contaminants on functional test bench
ISO 16232-6 2007-06	Road vehicles - Cleanliness of components of fluid circuits Part 6: Particle mass determination by gravimetric analysis
ISO 16232-7 2007-06	Road vehicles - Cleanliness of components of fluid circuits Part 7: Particle sizing and counting by microscopic analysis

[8] except chapter 9.3.3 LIBS, 9.3.6 X-ray microtomography and 9.4 Shortened analysis