

List of Testing Procedures within the Flexible Scope of Accreditation

Doc.-No.: VA-7.2.1-001

Index: 020_QA

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)".

Industrial Computed Tomographie (ICT):
not applicable (only house procedure)

 Industrial Metrology Technique (IMT): not applicable (only house procedure)

Materialography (MAT):

VDA 19 Part 1 2015	Inspection of Technical Cleanliness – Particulate Contamination of Functionally Relevant Automotive Components ¹
ISO 16232 2018-12	Road vehicles - Cleanliness of components and systems ²
VDG P201 2002-05	Volume deficits of castings made of non-ferrous metals
VDG P202 2010-09	Volume Deficits of Castings Made from Aluminium, Magnesium, and Zinc Casting Alloys
DIN 30901 2016-12	Heat treatment of ferrous materials - Determination of the depth and form of appearance of the internal oxidation
DIN 50190-3 1979-03 (withdrawn)	Hardness depth of heat-treated parts; Determination of the effective depth of hardening after nitriding
DIN 50190-4 1999-09 (withdrawn)	Hardness depth of heat-treated parts; Determination of the fusion hardening depth and the fusion depth

Shantor: 9.2.2 SEM/EDV 9.2.4 Bam

¹ Chapter: 8.3.2 SEM/EDX, 8.3.4 Raman spectroscopy and 8.3.5 IR (infrared spectroscopy) ² Chapter: 9.3.2 SEM/EDX, 9.3.4 Raman spectroscopy and 9.3.5 IR (infrared spectroscopy)



List of Testing Procedures within the Flexible Scope of Accreditation

Doc.-No.: VA-7.2.1-001

Index: 020_QA

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)".

- Materialography (MAT):

DIN EN 10328 2005-04 (withdrawn)	Iron and steel - Determination of the conventional depth of hardening after surface heating
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
DIN EN ISO 2639 2003-04 (withdrawn)	Steels - Determination and verification of the depth of carburized and hardened cases
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 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

Technical Cleanliness (TecSa):

VDA 19	Inspection of Technical Cleanliness – Particulate
2004	Contamination of Functionally Relevant Automotive
	Components ³

³ chapter D, E, F.1 to F.4



List of Testing Procedures within the Flexible Scope of Accreditation

Doc.-No.: VA-7.2.1-001

Index: 020_QA

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)".

Technical Cleanliness (TecSa):

VDA 19 Part 1 2015	Inspection of Technical Cleanliness – Particulate Contamination of Functionally Relevant Automotive Components ⁴
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
ISO 16232 2018-12	Road vehicles - Cleanliness of components and systems ⁵

Chemical Analytics (CHA):

VDA 19 Part 1 2015	Inspection of Technical Cleanliness – Particulate Contamination of Functionally Relevant Automotive Components ⁶
DIN EN ISO 11357-1 2023-06	Plastics - Differential scanning calorimetry (DSC) - 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
DIN EN ISO 11358-1 2022-07	Plastics - Thermogravimetry (TG) of polymers - Part 1: General principles

⁴ except chapter 8.3.3 LIBS, 8.3.6 X-ray microtomography and 8.4 Shortened analysis

⁵ except chapter 9.3.3 LIBS, 9.3.6 X-ray microtomography and 9.4 Shortened analysis

⁶ here chapter 8.3.2 SEM-EDS, 8.3.4 Raman and 8.3.5 IR (infrared-spectroscopy)



List of Testing Procedures within the Flexible Scope of Accreditation

Doc.-No.: VA-7.2.1-001

Index: 020_QA

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 Analytics (CHA):

DIN ISO 22309 Microbeam analysis - Quantitative analysis using energy-2015-11 dispersive spectrometry (EDS) for elements with an atomic number of 11 (Na) or above Ph.Eur.11.7 Investigation or identification of unknown substances 2.2.24 in organic and inorganic materials by means of Fourier transform infrared spectroscopy (FTIR) 2025-10 and Standard Practice for General Techniques for Obtaining **ASTM E1252** 1998 Infrared Spectra for Qualitative Analysis