

**The Appendix is an integral part of
Certificate of Accreditation No: 87/2024 of 21/02/2024**

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GRADUS, a.s.
CAB number 1603, GRADUS
Husova 121, 281 26 Týnec nad Labem

The laboratory applies a flexible approach to the scope of accreditation.

*The current list of activities carried out within the flexible scope is publicly available on the laboratory's website
<https://www.gradus-lab.cz/>.*

The laboratory provides opinions and interpretations of the test results.

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Corrosion test in salt spray by NSS, AASS, CASS method	AZP-1 (ČSN EN ISO 9227; ASTM B 117)	Metallic and non-metallic materials and their surface treatment - paint, varnish and coatings	D
2	Corrosion test of resistance to humidity in water-condensation atmosphere	AZP-2 (ČSN EN ISO 6270-1; ČSN EN ISO 6270-2; ČSN EN ISO 17872, tab. A1, Note. a, c, e)	Metallic and non-metallic materials and their surface treatment - paint, varnish and coatings	D
3	Combined corrosion test in salt spray and resistance to humidity in water-condensation atmosphere by NSS, AASS, CASS method	AZP-3 (ČSN EN ISO 9227; ČSN EN ISO 6270-2; PV 1210; ČSN EN ISO 11997-1; Renault D17 2028/--C.A [ECC1]; ČSN EN ISO 17872, tab. A1, Note a, c, e; Scania - STD 4319; CETP 00.00-L467; GMW 14872:2016; SAE J2334; BMW AA-0224)	Metallic and non-metallic materials and their surface treatment - paint, varnish and coatings	D
4	Test of adhesion by thermal shock	ČSN EN ISO 2819, Note 4.12	Metallic and non-metallic materials and their surface treatment - paint, varnish and coatings	-

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5*	Cross-cut test	ČSN EN ISO 2409; ASTM 3359	Metallic and non-metallic materials and their surface treatment – paint, varnish and coatings	D
6	Liquid resistance test	AZP-4 (ČSN EN ISO 2812-1; ČSN EN ISO 2812-2; ČSN EN ISO 2812-3; ČSN EN ISO 2812-4; TL 211:2016 cl. 8; TL 211 cl. 7; TL 226 cl. 6.2; TL 227:2016 cl. 3.12; TL 227 cl. 3.11; TL 256 cl. 11; TL 2605 cl. 2; TL 52451 cl. 5)	Metallic and non-metallic materials and their surface treatment – paint, varnish and coatings	-
7	Determination of resistance to cyclic corrosion load – Salt fog / Dry / Humidity / UV light	ČSN EN ISO 11997-2; ČSN EN ISO 12944-9; TKP 19B, Annex 19.B.4.3, cl. 19.B.P 9.4	Coatings, combined surface protective coatings	D
8	Damp heat cyclic test	AZP-6 (PV 1200; PV 2005-A; ČSN EN ISO 17872, tab. A1, Note a, c, e)	Metallic and non-metallic materials and their surface treatment – paint, varnish and coatings	D
9	Combined cycle test	AZP-7 (PV 1209)	Metallic and non-metallic materials and their surface treatment – paint, varnish and coatings	-
10*	Determination of film hardness by pencil test	ČSN EN ISO 15184; ASTM D3363	Metallic and non-metallic materials and their surface treatment – paint, varnish and coatings	-

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11	Pressure Washer Test	AZP-8 (PV 1503A; DIN 55662; ČSN EN ISO 6270-2; ČSN EN ISO 16925; ISO 20653, specification 9K [IPX9K])	Metallic and non-metallic materials and their surface treatment – paint, varnish and coatings	D
12	Environmental test – Cold	AZP-9 (ČSN EN 60068-2-1 ed.2)	Coatings of metallic and non-metallic materials	D
13.	Determination of stone-chip resistance of coatings (Multi-impact testing)	AZP-10 (ČSN EN ISO 20567-1)	Coatings of metallic and non-metallic materials	-
14*	Determination of gloss	ČSN EN ISO 2813	Surface layers	-
15*	Colour and colour difference measurement by tristimulus colorimetry	AZP-11 (ASTM E 1347; ČSN EN ISO/CIE 11664-4; ČSN EN 13523-3)	Paint coatings and plastics	D
16	Determination of resistance to humid atmosphere containing sulphur dioxide	AZP-12 (ČSN EN ISO 22479; ČSN EN ISO 3231:1998; ČSN ISO 6988:1995; DIN 50018:1997, KFW 1.0S; DIN 50018:1997, KFW 2.0S; DIN 50018:2013, AHT 1.0S; DIN 50018:2013 AHT 2.0S)	Coatings of metallic and non-metallic materials	D
17	Determination of resistance under UV lamps	AZP-13 (ASTM G 154; ČSN EN ISO 4892-1; ČSN EN ISO 4892-3; ČSN EN ISO 927-6; ČSN EN ISO 16474)	Paint coatings and plastics	D
18*	Pull-off test for adhesion	ČSN EN ISO 4624; ČSN EN ISO 16276-1; ČSN 73 2577; ČSN EN 1542	Surface treatments on building structures	A

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19	Frost resistance test	AZP-14 (ČSN 73 2579; ČSN EN 13687-3)	Surface treatments on building structures	D
20*	Evaluation of degradation of coatings of specimens subjected to corrosion tests	AZP-15 (ČSN EN ISO 4628-1; ČSN EN ISO 4628-2; ČSN EN ISO 4628-3; ČSN EN ISO 4628-4; ČSN EN ISO 4628-5; ČSN EN ISO 4628-6; ČSN EN ISO 4628-7; ČSN EN ISO 4628-8; ČSN EN ISO 4628-10; ČSN EN ISO 10289)	Coatings of metallic and non-metallic materials	D
21*	Determination of coating thickness by magnetic induction method	ČSN EN ISO 2178; ČSN EN ISO 2808:2007, method 7C, 12A ČSN EN ISO 2808, method 7B2, 13A	Coatings of magnetic metallic materials	-
22*	Determination of coating thickness by eddy current method	ČSN EN ISO 2808:2007, method 7D, 12B; ČSN EN ISO 2808, method 7C, 13B	Coatings of non-magnetic metallic materials	-

¹ asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises

² if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

³ degrees of freedom: A – Flexibility concerning materials/products (subject of the test), B – Flexibility concerning components/parameters/characteristics, C – Flexibility concerning the performance of the method, D – Flexibility concerning the method

The laboratory can modify the test procedures with the specified degree(s) of freedom in the scope of accreditation while maintaining the principle of measurement. If no degree of freedom is specified, the laboratory cannot apply a flexible approach to the scope of accreditation for the test.

Explanations and abbreviations:

ASTM, PV, Renault D, Scania - STD, CETP, GMW, SAE, BMW AA, TL, TKP
and procedures

Producer or Branch specific standards