

**The Appendix is an integral part of
Certificate of Accreditation No: 407/2024 of 19/08/2024**

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

SG Geotechnika a.s.

CAB number 1119, Geomechanics Laboratory and Field Testing

Geologická 988/4, Hlubočepy, 152 00 Praha 5

The laboratory provides opinions and interpretations of the test results.

Detailed information on activities within the scope of accreditation (source literature) is given in the section „Specification of the scope of accreditation“.

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of water content by gravimetry	ČSN EN ISO 17892-1	Soils	-
2*	Static plate load test	ČSN 72 1006, Annex A, B and D	Soils and aggregate mixtures	-
3*	Determination of bulk density	SOP 1 (ČSN 72 1010, cl. A and B; ČSN EN ISO 17892-2; Methods I, chap. 2)	Soils and soil replacement materials	-
4	Determination of particle density by pycnometer	ČSN EN ISO 17892-3	Soils	-
5	Determination of particle size distribution	SOP 2 (ČSN EN ISO 17892-4; Methods I, chap. 4)	Soils and soil replacement materials	-
6	Determination of liquid (fall cone method) and plastic limits	ČSN EN ISO 17892-12, chap. 5.3 and 5.5	Soils	-
7	Determination of Atterberg limits – Casagrande method	ČSN EN ISO 17892-12, chap. 5.4 and 5.5	Soils	-
8	Determination of carbonates	ČSN 72 1022	Soils	-
9	Determination of organic substances in soils by oxidimetry	Methods I, chap. 7	Soils	-
10	Direct shear test	ČSN EN ISO 17892-10	Soils	-
11	Determination of laboratory reference density and water content – Proctor compaction	ČSN EN 13286-2	Unbound and hydraulically bound mixtures	-
12	Determination of compressibility in oedometer apparatus	ČSN EN ISO 17892-5	Soils	-
13	Determination of permeability by constant and falling head	ČSN EN ISO 17892-11	Soils	-

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
14	Determination of the water content by gravimetry	ČSN EN 1097-5	Aggregates	-
15	Determination of particle size distribution – Sieving method	ČSN EN 933-1	Aggregates	-
16	Dynamic plate load test	ČSN 73 6192, method C	Soils and aggregate mixtures	-
17	Determination of particle shape - Shape index	ČSN EN 933-4	Aggregates	-
18	Determination of angularity of aggregates	OTP Aggregates for railway ballast, Annex E	Aggregates	-
19	Determination of roundness of aggregates	OTP Aggregates for railway ballast, Annex F	Aggregates	-
20	Determination of various particles	ČSN 72 1180, cl. 5 to 7	Aggregates	-
21	Determination of water absorption	ČSN EN 1097-6, Annex B	Aggregates	-
22	Determination of resistance to freezing and thawing	ČSN EN 1367-1; ČSN EN 13450, Annex F and H	Aggregates	-
23	Test method for the determination of California bearing ratio, immediate bearing index and linear swelling	ČSN EN 13286-47	Unbound and hydraulically bound mixtures	-
24	Methods for the determination of resistance to fragmentation by Los Angeles Test	ČSN EN 1097-2, Annex A.2	Aggregates	-
25	Determination of uniaxial compressive strength	ČSN EN 12390-3	Hardened concrete	-
26	Determination of resistance to fragmentation by impact fragmentation test method	ČSN EN 13450, Annex A.3	Aggregates	-
27	Determination of frost heave	ČSN 72 1191	Soils and soil replacement materials	-

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
28*	Integrity testing by ultrasonic crosshole testing (CHA)	SOP 5 (Pile Dynamics, Inc. manual)	Piles	-
29*	Integrity testing by PIT method	SOP 6 (Pile Dynamics, Inc. manual)	Piles	-
30*	Measurement of vertical, horizontal and spatial displacements and deformations by geodetic methods	SOP 7 (ČSN 73 0220; ČSN 73 0212; ČSN 73 0202; ČSN 73 0205; ČSN 73 0411; ČSN 73 0405)	Construction works and earth surface	-
31*	Measurement of convergences	SOP 8 (ČSN 73 0220; ČSN 73 0212; ČSN 73 0202; ČSN 73 0205; ČSN 73 0411)	Construction works	-
32*	Measurement geotechnical seismicity	SOP 9 (ČSN 73 0040; ČSN EN 1998-1)	Construction works and earth surface	-
33	Determination of density	ČSN EN 12390-7	Hardened concrete	-
34	Determination of uniaxial compressive strength	SOP 10 (ČSN EN 1926; ASTM D7012-14; Methods III, chap. 5)	Rocks	-
35	Determination of compressive strength of irregular fragments	Methods III, chap. 6	Rocks	-
36	Determination of indirect tensile strength	Methods III, chap. 9	Rocks	-
37	Determination of water absorption	Methods III, chap. 2	Rocks	-
38	Determination of deformation moduli due to compressive load	Methods III, chap. 7	Rocks	-

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- 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 the laboratory does not apply a flexible approach to the scope of accreditation

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (source literature)
3, 5, 9	Laboratory test methods in soil and rock mechanics I, Soil Mechanics. ZAVORAL, Jiří, Prague: Czech Geological Survey, 1987.
34-38	Laboratory test methods in soil and rock mechanics III, Rock Mechanics. ZAVORAL, Jiří, Prague: Czech Geological Survey, 1987.

Explanations of abbreviations:

CHA – Cross Hole Analysis

OTP – General technical specifications (Railway Infrastructure Administration, state organization)

PIT – Pile Integrity Test

"This document is an appendix to the certificate of accreditation. In case of any discrepancies between the English and Czech versions, the Czech version shall prevail, both for the certificate appendix and the certificate itself. "