



**EA MLA Signatory** Český institut pro akreditaci, o.p.s. Olšanská 54/3, 130 00 Praha 3

issues

according to section 16 of Act No. 22/1997 Coll., on technical requirements for products, as amended

## CERTIFICATE OF ACCREDITATION

No. 104/2021

SG Geotechnika a.s. with registered office Geologická 988/4, Hlubočepy, 152 00 Praha 5, Company Registration No. 41192168

> to the Testing Laboratory No. 1119 Geomechanics Laboratory and Field Testing

### Scope of accreditation:

Geotechnical laboratory and field testing of physical and mechanical properties of soils and soil replacement materials, testing of aggregates, strength tests of concrete, pile integrity tests, geodetic measurement and measurement of technical seismicity to the extent as specified in the appendix to this Certificate.

This Certificate of Accreditation is a proof of Accreditation issued on the basis of assessment of fulfillment of the accreditation criteria in accordance with

### ČSN EN ISO/IEC 17025:2018

In its activities performed within the scope and for the period of validity of this Certificate, the Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Body meets the specified accreditation requirements in accordance with the relevant regulations applicable to the activity of an accredited Conformity Assessment Body.

This Certificate of Accreditation replaces, to the full extent, Certificate No.: 420/2019 of 20. 8. 2019, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: 20. 8. 2024

Prague: 4. 2. 2021



Pavel Nosek Director of the Department

of Testing and Calibration Laboratories Czech Accreditation Institute Public Service Company

# The Appendix is an integral part of Certificate of Accreditation No. 104/2021 of 04/02/2021

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

### SG Geotechnika a.s.

Geomechanics Laboratory and Field Testing Geologická 988/4, Hlubočepy, 152 00 Praha 5

The Laboratory provides expert opinions and interprets test result.

### Tests:

Ordinal number <sup>1</sup>	Test procedure/ method name	Test procedure/ method identification <sup>2</sup>	Tested object
1.	Determination of water content	ČSN EN ISO 17892-1	Soils and soil replacement materials
2.*	Static plate load test	ČSN 72 1006, Annex A, B and D	Soils and soil replacement materials and aggregate mixtures
3.*	Determination of bulk density	SOP 1 (ČSN 72 1010, p. A and B; ČSN EN ISO 17892-2; Methods, chap. 2)	Soils and soil replacement materials
4.	Determination of particle density by pycnometer	ČSN EN ISO 17892-3	Soils and soil replacement materials
5.	Determination of particle size distribution	SOP 2 (ČSN EN ISO 17892-4; Methods, chap. 4)	Soils and soil replacement materials
6.	Determination of Atterberg limits – cone test	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 in soils	ČSN 72 1022	Soils
9.	Determination of organic substances in soils by oxidimetry	Methods, chap. 7	Soils
10.	Direct shear test	ČSN EN ISO 17892-10	Soils and soil replacement materials
11.	Determination of laboratory reference density and water content – Proctor compaction	ČSN EN 13286-2	Soils and soil replacement materials
12.	Determination of compressibility in oedometer apparatus	ČSN EN ISO 17892-5	Soils and soil replacement materials

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Ordinal number <sup>1</sup>	Test procedure/ method name	Test procedure/ method identification <sup>2</sup>	Tested object
13.	Determination of permeability by constant and falling head	ČSN EN ISO 17892-11	Soils and soil replacement materials
14.	Determination of the water content by drying in a ventilated oven	ČSN EN 1097-5	Aggregates
15.	Determination of particle size distribution – Sieving method	ČSN EN 933-1	Aggregates
16.*	Dynamic plate load test (equipment of group C)	ČSN 73 6192	Soils and soil replacement materials
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 aggregate particles	ČSN 72 1180, chap. 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 a H	Aggregates
23.	Test method for the determination of California bearing ratio, immediate bearing index and linear swelling	ČSN EN 13286-47	Soils and soil replacement materials
24.	Methods for the determination of resistance to fragmentation by Los Angeles Test	ČSN EN 1097-2, Annex A.1	Aggregates
25.	Determination of uniaxial compressive strength of concrete	ČSN EN 12390-3	Concrete

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Ordinal number <sup>1</sup>	Test procedure/ method name	Test procedure/ method identification <sup>2</sup>	Tested object
26.	Determination of resistance to fragmentation by impact fragmentation test method	ČSN EN 13450, Annex A.2	Aggregates
27.	Determination of the frost heave testing method of soils	ČSN 72 1191	Soils and soil replacement materials
28.*	Integrity testing of piles by ultrasonic crosshole testing (CHA)	SOP 5 (Pile Dynamics, Inc. manual)	Piles
29.*	Integrity testing of piles 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	Construction works and earth surface
31.*	Measurement of convergentions	SOP 8	Construction works
32.*	Measurement geotechnical seismicity	SOP 9 (ČSN 73 0040; ČSN EN 1998-1)	Construction works and earth surface

Asterisk\* at the ordinal number identifies the tests, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

<sup>2</sup> 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 edition of the specified procedure is used (including any changes).

Explanations of abbreviations:

CHA ... Cross Hole Analysis

Methods... Laboratory test methods in soil and rock mechanics, Czech Institute of Geology 1987

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

PIT ... Pile Integrity Test

SOP... Standard Operating Procedure

