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

**Technický a zkušební ústav stavební Praha, s.p.** CAB number 2275, TZÚS Praha, s.p. Calibration Laboratory – TIS Branch Prosecká 811/76a, Prosek, 190 00 Praha 9

#### **Calibration laboratory locations:**

1. Technický a zkušební ústav stavební Praha, s.p. – TIS Branch

Prosecká 811/76a, 190 00 Praha 9 Nemanická 441, 370 10 České Budějovice

3. Technický a zkušební ústav stavební Praha, s.p. – Branch 0200

### CMC for the field of measured quantity: Length

Ord	Calibrated quantity / Subject of calibration	Nom	inal ra	nge	Parameter(s)	Lowest stated expanded		Calibration	Loca- tion
number <sup>1</sup>		min unit		max unit	of the measurand	measurement uncertainty <sup>2</sup>	Calibration principle	procedure identification <sup>3</sup>	
1	Dial indicators	0 mm	to	100 mm		9 µm	Measurement on a spiral microscope	IP 0960K003	1
2	Slide gauges	0 mm	to	250 mm		0.015 mm	Measurement parallel gauge blocks	IP 0960K006	1
		250 mm	to	450 mm		0.03 mm			
		450 mm	to	1,000 mm		0.05 mm			
3 to 7	Reserved								
8	Electronic length sensors	0 mm	to	250 mm		0,01 mm	Measurement of parallel gauge blocks	IP 0960K005	1

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

<sup>2</sup> The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02 M a part of CMC and it is the lowest value of the respective uncertainty. If not stated otherwise, its coverage probability is approx. 95 %. If not stated otherwise, the uncertainty values stated without a unit are relative to the measured value. The uncertainty value stated herein is based on the best conditions achievable by the laboratory; the uncertainty value of a specific calibration may be higher depending on the conditions of such a calibration. For identical extreme values of adjacent ranges, the lower uncertainty value always applies.

<sup>3</sup> If the document identifying the calibration procedure is dated only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is used (including any changes).

#### Explanations and abbreviations:

L Measured length in m

1

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### CMC for the field of measured quantity: Flow rate

Ord. number <sup>1</sup>		Nomi	nal r	ange	Parameter(s) of the	Lowest stated	Calibration principle	Calibration procedure identification <sup>3</sup>	Loco
	Calibrated quantity / Subject of calibration	min unit		max unit	measurand	measurement uncertainty <sup>2</sup>			tion
1	Flowmeters that can be calibrated with water	0.005 m <sup>3</sup> /h	to	20 m <sup>3</sup> /h	cold water	0.15 %	Mass method	IP 0960K011	1
		20 m <sup>3</sup> /h to 20			hot water	0.20 %			
				200 m <sup>3</sup> /h	cold water	0.15 %			
					hot water	0.20 %			
2	Flowmeters that can be calibrated with water	0.005 m <sup>3</sup> /h	to	20 m <sup>3</sup> /h	cold water	0.20 %	Volume method	IP 0960K011	1
		20 m <sup>3</sup> /h to			hot water	0.25 %			
				200 m <sup>3</sup> /h	cold water	0.20 %			
					hot water	0.25 %			

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CAB number 2275, TZÚS Praha, s.p. Calibration Laboratory – TIS Branch

Prosecká 811/76a, Prosek, 190 00 Praha 9

### CMC for the field of measured quantity: Force, mechanical tests

Ord.	Calibrated quantity / Subject of calibration	Nom	ninal ra	nge	Parameter(s) of	Lowest stated expanded	Calibration principle	Calibration	Location
number <sup>1</sup>	Canorated quantity / Subject of canoration	min unit		max unit	the measurand	uncertainty <sup>2</sup>		identification <sup>3</sup>	Location
1*	Force / tensile testing machines and presses, working force gauges	1 N	to	30 N	Tension	0.080 %	Loading with weights	IP 0960K072	1
							Comparison with a standard		
		30 N	to	200 N		0.040 %	force-proving instrument		
		200 N	to	20 kN		0.025 %			
		20 kN	up to	100 kN		0.060 %			
		1 N	to	30 N	Pressure	0.080 %	Loading with weights	-	
							Comparison with a standard		
		30 N	to	200 N		0.040 %	force-proving instrument		
		200 N	to	2 kN		0.025 %			
		2 kN	to	100 kN		0.040 %			
		100 kN	to	500 kN		0.070 %			
		500 kN	to	1 MN		0.090 %			
		1 MN	to	5 MN		0.025 %			
2	Hardness / Schmidt type hardness						Check impacts on a standard anvil	IP 0960K001	1
	testers (for concrete and other materials)	73 R <sub>k</sub>	to	77 R <sub>k</sub>	Type L	0.7 R <sub>k</sub>			
		79 R <sub>k</sub>	to	83 R <sub>k</sub>	Type N	0.7 R <sub>k</sub>			

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Explanations and abbreviations:

Rk Offset value (dimensionless quantity) corresponding to 0.5 division of a scale

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### CMC for the field of measured quantity: Pressure

Ord. number <sup>1</sup>		Nom	inal raı	ige	Parameter(s) of the	Lowest stated	Calibration principle	Calibration	
	Calibrated quantity / Subject of calibration	min unit	m	ax unit	measurand	measurement uncertainty <sup>2</sup>		procedure identification <sup>3</sup>	Location
1	Deformation pressure gauges, electromechanical pressure gauges with pressure transducer or digital indication	0.025 MPa	to	50 MPa	positive gauge pressure liquid	0.08 %	Comparison with a standard piston pressure gauge	IP 0960K018	1

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#### CMC for the field of measured quantity: Temperature

Ord. number <sup>1</sup>	Calibrated quantity / Subject of calibration	Nominal range				F	Parameter(s)	Lowest stated		Calibration	
		min	unit		max u	ınit	of the measurand	measurement uncertainty <sup>2</sup>	Calibration principle	procedure identification <sup>3</sup>	Location
1	Reserved										
2*	Direct-indicating thermometers, temperature measuring equipment	-40 100 250 500	°C °C °C °C	to to to to	100 °C 250 °C 500 °C 900 °C 1,200 °C			0.3 °C 0.4 °C 1.4 °C 1.9 °C 2.7 °C	Comparison with a standard digital thermometer in a calibrated device	IP 0960K014	3
3	Direct-indicating thermometers	0	°C	to	180 °C	2		0.2 °C	Comparison with a reference resistance temperature sensor Pt100 in water and oil bath	IP 0960K020	1

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