



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. 650/2019

Mitutoyo Česko s.r.o.
with registered office Dubská 1626, 415 01 Teplice 1, Company Registration No. 25458400

to the Calibration Laboratory No. 2390
Calibration Laboratory

Scope of accreditation:

Calibration of coordinate measuring machines (CMM), instruments for the measurement of surface roughness and profile, profile projectors, microscopes and height gauges 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.: 380/2018 of 13. 7. 2018, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: **3. 12. 2024**

Prague: 3. 12. 2019



Jiří Růžička
Director
Czech Accreditation Institute
Public Service Company



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

Mitutoyo Česko s.r.o.
Calibration Laboratory
Dubská 1626, 415 01 Teplice 1

CMC for the field of measured quantity: Length

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work place
		min. unit	max. unit					
1*	Coordinate measuring machines	0 m 0 m	up to 5 m up to 1.5 m 25 mm		(0.3L + 0.1) µm (0.6L + 0.3) µm 0.2 µm	measurement by a laser interferometer comparison using a step gauge comparison with a reference sphere	MCZ-PI-KL_SDI5_KP01 (ČSN EN ISO 10360-2, ČSN EN ISO 10360-4, ČSN EN ISO 10360-5)	
2*	Surface roughness measuring instruments Ra Rz Rsm Linearity measurement error Straightness measurement error	0.1 µm 0.01 µm 0.1 µm -400 µm -15 µm	up to 50 µm up to 50 µm up to 400 µm up to 400 µm 15 µm		3.4 % 2.4 % 0.6 % 4 µm 0.06 µm	comparison with a roughness standard comparison with UDT linearity standard comparison with an optical plane standard	MCZ-PI-KL_SDI5_KP02 (ČSN EN ISO 3274, ČSN EN ISO 12179)	
3*	Surface profile measuring instruments Straightness measurement error	0 mm 0 mm -15 µm	up to 200 mm up to 60 mm 15 µm	axes X, Y Z-axis	(0.3L + 0.2) µm (0.3L + 0.2) µm 0.06 µm	measurement by a laser interferometer comparison with a parallel gauge comparison with an optical plane standard	MCZ-PI-KL_SDI5_KP02 (ČSN EN ISO 3274, ČSN EN ISO 12179)	



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Mitutoyo Česko s.r.o.
Calibration Laboratory
Dubská 1626, 415 01 Teplice 1

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work place
		min. unit	max. unit					
4*	Profile projectors	0 mm	up to 200 mm		(8.9L + 1.2) μm	comparison with a glass rule	MCZ-PI-KL_SD15_KP 03	
	Parallellity P _{XY}	-200 μm	200 μm		1 μm			
	Cross hair position E _{CH}	-200 μm	200 μm		4 μm			
	Magnification error	-1 %	1 %		0.01 % (abs.)			
5*	Measuring microscopes	0 mm	up to 400 mm		(8.9L + 1.2) μm	measurement by a laser interferometer	MCZ-PI-KL_SD15_KP 04	
	Parallellity P _{XY}	-200 μm	200 μm		1 μm			
	1D measuring instruments (height gauges)	0 m	up to 1 m		(0.23L + 0.05) μm			
		0 m	up to 1 m		(0.5L + 0.3) μm	comparison using a step gauge		

¹ Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

² The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02, 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 value measured. If the calibration is carried out outside the laboratory premises, the measurement uncertainty may be affected.

³ 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).

Explanatory notes:

L – Length in metres

Parallellity P_{XY} – Parallellity of a cross table with a cross hair P_{XY}



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

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CMC for the field of measured quantity: Plane angle

Ord. number	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work place
		min. unit	max. unit					
1*	Surface profile measuring instruments Error of angle measurement in the XZ plane		135 °		0.003 4°	direct measurement of angle gauge 135°	MCZ-PI-KL_SD15_KP 02 (ČSN EN ISO 3274, ČSN EN ISO 12179)	
2*	Profile projectors Angle measurement error – 360° focus screen rotation		360 °		0.5'	direct measurement of glass gauge position	MCZ-PI-KL_SD15_KP 03	

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² The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02, 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 value measured. If the calibration is carried out outside the laboratory premises, the measurement uncertainty may be affected.

³ 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).

