



EA MLA Signatory
Český institut pro akreditaci, o.p.s.
Hájkova 2747/22, Žižkov, 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. 620/2024

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

for the Calibration Laboratory No. 2390
Calibration Laboratory

Scope of accreditation:

Calibration of meters in the field of length and plane angle 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 Conformity Assessment Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Accredited 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.: 599/2023 of 14/11/2023, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: 21/11/2029

Prague: 21/11/2024



PP
Jan Velišek
Director of the Department
of Testing and Calibration Laboratories
Czech Accreditation Institute



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

Mitutoyo Česko s.r.o.
CAB number 2390, 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 measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min. unit	max. unit					
1*	Coordinate measuring machines (CMM) Spatial length Sensing system error	0 m -1 mm	to to	5 m 1 mm	(0.3L + 0.1) μm 0.2 μm	Measurement by a laser interferometer Reference ball measurement	MCZ-PI-KL_SD15_KP01 (ČSN EN ISO 10360-2, ČSN EN ISO 10360-5)	
2*	Coordinate measuring machines equipped with a camera system (VMM) axes X, Y Z-axis	0 m 0 m	to to	1 m 0.3 m	(2.4L + 0.2) μm (3.1L + 0.3) μm	Measurement with a glass gauge Measurement using parallel gauge blocks	MCZ-PI-KL_SD15_KP06	
3*	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	to to to to	50 μm 50 μm 400 μm 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_SD15_KP02 (ČSN EN ISO 3274, ČSN EN ISO 12179)	
4*	Surface profile measuring instruments axes X, Y Z-axis Straightness measurement error	-15 μm	to to	200 mm 60 mm 15 μm	(0.3L + 0.2) μm (0.3L + 0.2) μm 0.06 μm	Measurement by a laser interferometer Measurement using parallel gauge blocks Measurement with an optical plane standard	MCZ-PI-KL_SD15_KP02 (ČSN EN ISO 3274, ČSN EN ISO 12179)	



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		min. unit	max. unit					
5*	Profile projectors	0 mm to	200 mm		(8.9L + 1.2) μm	Measurement with a glass gauge	MCZ-PI-KL_SD15_KP03	
	Parallelity P _{Xy}	-200 μm	200 μm					
	Cross hair position E _{CH}	-200 μm	200 μm					
	Magnification error	-1 %	1 %		(8.9L + 1.2) μm	Measurement with a laser interferometer	MCZ-PI-KL_SD15_KP04	
	Measuring microscopes	0 mm to	400 mm					
6*	Parallellity P _{Xy}	-200 μm	200 μm		1 μm			
	1D measuring instruments (height gauges)	0 m to	1 m		(0.23L + 0.05) μm			
	Ring gauges	-400 μm to	400 μm		4 μm	Measurement with UDT linearity standard		
7*	Sensor linearity measurement error	-200 μm to	200 μm		0.02 μm	Measurement with reference hemisphere		
	Spindle axial runout	-200 μm to	200 μm		0.04 μm	Measurement with reference hemisphere		
	Spindle radial runout	-200 μm to	200 μm		1.8 μm	Measurement with reference cylinder		
	Cylindricity	0 μm to	200 μm					

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 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.

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

Parallelity P_{Xy} – Parallelity of a cross table with a cross hair P_{Xy}



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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 measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min. unit	max. unit					
1*	Error of angle measurement in the XZ plane / Surface profile measuring instruments		135 °		0.0034°	Measurement of angle gauge 135°	MCZ-PI-KL_SD15_KP02 (ČSN EN ISO 3274, ČSN EN ISO 12179)	
2*	Angle measurement error Profile projectors		360 °		0.5'	Measurement of glass gauge position by rotating the screen 360°	MCZ-PI-KL_SD15_KP03	

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² 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.

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"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."

