NÁRODNÍ AKREDITAČNÍ ORGÁN

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. 116/2022

AKL ZÁLEŠÁK s.r.o.
with registered office Korejská 27, 616 00 Brno, Company Registration No. 49449923

to the Calibration Laboratory No. **2230**
Calibration Laboratory

Scope of accreditation:

Calibration in the fields of length, angle, volume, force and mechanical testing 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.: 575/2019 of 5. 11. 2019, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: **8. 3. 2027**

Prague: 8. 3. 2022

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Lukáš Burda
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. 116/2022 of 08/03/2022

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

AKL ZÁLEŠÁK s.r.o.
Calibration Laboratory
Korejská 27, 616 00 Brno

Calibration laboratory locations:

1. **Laboratory Brno** Korejská 27, 616 00 Brno
2. **Laboratory Traplice** Traplice 60, 687 04 Traplice

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*	Strain gauges as a part of tensile testing machines and presses	0 mm 10 mm	to to	10 mm 100 mm			1.3 µm 4.7 µm	Direct measurement by a strain gauge calibrator	KP-AKL-04-01, ČSN EN ISO 9513, ASTM E83	1
2*	Calibration of crossbar movement of tensile testing machines and presses, force measuring devices	0 mm 50 mm	to to	50 mm 1,000 mm			2.3 µm (0.15·L + 0.015) mm	Direct measurement by length standards	KP-AKL-03-03	1
3*	Length gauges, indicators	0 mm	to	100 mm			(5·L + 0.7) µm	Direct measurement by length standards	KP-AKL-03-03	1

[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:
ASTM American Society for Testing and Material (US Technical Standard)
L nominal length (m)

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AKL ZÁLEŠÁK s.r.o.
Calibration Laboratory
Korejská 27, 616 00 Brno

CMC for the field of measured quantity: Plane angle

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*	Rotation angle / Torque wrenches	0 ° 120 °	to to	120 ° 300 °			0.21° 0.33°	Comparison with a rotation angle sensor	KP-AKL-13-02, VDI/VDE 2648 Blatt 1	2

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

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[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:
VDI/VDE Verien Deutscher Ingenieure / Verband der Elektrotechnik Elektronik Informationstechnik

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

AKL ZÁLEŠÁK s.r.o.
Calibration Laboratory
Korejská 27, 616 00 Brno

CMC for the field of measured quantity: Volume

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*	Equipment for the determination of air content in fresh concrete and mortar	0 %		to 20 %			0.025 %	Direct measurement of weight using scales	KP-AKL-06-11, ČSN EN 12350-7	1

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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).

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

AKL ZÁLEŠÁK s.r.o.
Calibration Laboratory
Korejská 27, 616 00 Brno

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

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*	Force measuring devices, dynamometers	0 kN	to	100 kN		Tension, pressure	0.007 %	Comparison with a force standard	KP-AKL-01-02, ČSN EN ISO 7500-1, ČSN EN ISO 376	2
2*	Tensile testing machines and presses, force measuring devices, dynamometers, adhesion testers, tensile creep machines	0 kN 0.2 MN	to to	200 kN 1.0 MN		Tension	0.07 % 0.2 %	Comparison with a force standard	KP-AKL-01-02, ČSN EN ISO 376, ČSN EN ISO 7500-1, ČSN EN ISO 7500-2, ASTM E4	1
3*	Tensile testing machines and presses, force measuring devices, dynamometers	0 kN 0.2 MN 1.0 MN	to to to	200 kN 1.0 MN 5.0 MN		Pressure	0.07 % 0.1 % 0.2 %	Comparison with a force standard	KP-AKL-01-02, ČSN EN ISO 376, ČSN EN ISO 7500-1, ASTM E4	1
4*	Testing presses – loading plates	0 kN/kN	to	0.8 kN/kN		Self-setting of the upper pressure plate and limitation of movement of the upper press plate	0.00026 kN/kN	Comparison with a force standard	AKL-01-05-01, ČSN EN 12390-4	1
5*	Pendulum hammers	0.1 J	to	20,00 0 J			0.25 %	Indirect measurement	AKL-01-02-01, ČSN EN ISO 148-2, ASTM E23, part A2	
6*	Torque / Torque tools, equipment for the calibration of torque tools, torque sensors, tightening systems	0.01 Nm	to	20 Nm			0.08 %	Comparison with a torque standard	KP-AKL-13-02, ČSN EN ISO 6789-1, BS 7882	1, 2

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Calibration Laboratory
Korejská 27, 616 00 Brno

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					
		20 Nm	to	100 Nm			0.11 %			
		100 Nm	to	1,000 Nm			0.23 %			

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[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:

ASTM	American Society for Testing and Material (US Technical Standard)
BS	British Standard
VDI/VDE	Verien Deutscher Ingenieure / Verband der Elektrotechnik Elektronik Informationstechnik

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