



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Kon-Sult, Inc.
6 Birch Street
Hudson, NH 03051

Fulfills the requirements of

ISO/IEC 17025:2017

and

ANSI/NCSL Z540-1-1994 (R2002)

In the field of

CALIBRATION

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

A handwritten signature in black ink, appearing to read 'R. Douglas Leonard Jr.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 04 October 2024
Certificate Number: AC-1243



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory
quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017 AND
ANSI/NCSL Z540-1-1994 (R2002)**

Kon-Sult, Inc.
6 Birch Street
Hudson, NH 03051
June Kopka
603-882-7464

CALIBRATION

Valid to: **October 4, 2024**

Certificate Number: **AC-1243**

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) ²	Reference Standard, Method, and/or Equipment
Angle Blocks/Plates	Up to 90 Degrees	14 arc seconds	Electronic Amp and Sine Bar
1-2-3 Blocks Parallelism Squareness	Up to 3 in Up to 76 mm	20 µin 0.51 µm 61 µin 1.5 µm	Comparison to Gage Blocks Electronic Amp Linear Height
2-4-6 Blocks Parallelism Squareness	Up to 6 in Up to 152 mm	27 µin 0.69 µm 89 µin 2.3 µm	Comparison to Gage Blocks Electronic Amp Linear Height
Angle Irons Parallelism Squareness	Up to 6 in Up to 152 mm	18 µin 0.5 µm 88 µin 2.2 µm	Electronic Amp Linear Height
Parallels	Up to 12 in Up to 305 mm	36 µin 0.9 µm	Electronic Amp
Sine bars/Plates	5 in 127 mm 10 in 254 mm	24 µin 0.6 µm 35 µin 0.88 µm	Electronic Amp Gage Blocks
Vee Blocks Parallelism Squareness	Up to 5 in Up to 127 mm	31 µin 0.8 µm 77 µin 2 µm	Electronic Amp
Protractor	Up to 90 degrees	15 arc seconds	Angle Blocks

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) ²	Reference Standard, Method, and/or Equipment
Gage Blocks	Up to 8 in	(3 + 5L) μin	Master Gage Blocks Electronic Comparator
Dial / Digital Indicators ¹ Resolution 0.000 05 in 0.000 1 in 0.000 5 in 0.001 in	Up to 4 in	53.2 μin 74 μin 292 μin 580 μin	Gage Blocks
Test Indicator ¹	Up to 0.1 in Up to 0.25 mm	70 μin 1.2 μm	Gage Blocks Surface plate
Bore gages Indicator Resolution 0.000 05 in 0.000 1 in 0.000 5 in 0.001 in	Up to 12 in	56.8 μin 75.6 μin 292 μin 580 μin	Micrometer Head
Electronic amplifiers 5 μin resolution 0.1 μm resolution	Up to 0.05 in Up to 1.3 mm	6 μin 0.15 μm	Gage Blocks Surface plate
Linear Measuring Machines	Up to 40 in	(63 + 4L) μin	Gage Blocks Force Gauge
Bench Micrometer	Up to 11 in	25 μin	Gage Blocks Force Gauge
Micrometers ¹	Up to 40 in	(78 + 4.2L) μin	Gage Blocks
Depth Micrometers ¹	Up to 12 in	(175 + 5L) μin	Gage Blocks
Inside Micrometer	Up to 40 in	(48 + 2L) μin	Gage Blocks
Micrometer Head ¹	Up to 2 in Up to 50 mm	64 μin 1.6 μm	Gage Blocks
Height Master	Up to 40 in	(8 + 3L) μin	Gage Block, Amp
Height Gage	Up to 40 in	(190 + 11L) μin	Gage Blocks
Intrimike	Up to 6 in Up to 152 mm	71 μin 1.8 μm	Master Rings
Calipers / Verniers ¹	Up to 80 in	(289 + 14L) μin	Gage Blocks Micrometer Standards
Micrometer Standards	Up to 38 in	(34 + 5L) μin	Gage Blocks Linear measuring machines

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) ²	Reference Standard, Method, and/or Equipment
Thread Plug Gages Major Diameter	Up to 6 in	54 μin	Bench Micrometer Gage Blocks Thread Measuring Wires
	Up to 150 mm	1.4 μm	
Pitch Diameter	Up to 6 in	99 μin	
	Up to 150 mm	2.5 μm	
Plain Plug Gages	Up to 2 in	20 μin	Gage Blocks Electronic Comparator
	Up to 50 mm	0.36 μm	
Plain Ring Gages	Up to 6 in	32 μin	Gage Blocks Internal/External Comparator
	Up to 150 mm	0.81 μm	
Thread Ring Gages	Up to 6 in	76 μin	Set Thread Plug Gages
	Up to 150 mm	1.93 μm	
Pin Gages	Up to 1 in	87 μin	Gage Blocks Micrometer
	Up to 25 mm	1.5 μm	
Squares	Up to 18 in	(20 + 2L) μin	Linear Height
Levels	Up to 18 in	64 μin	Gage Blocks
	Up to 457 mm	1.6 μm	
Granite Surface Plates ¹ Overall Flatness Local Area Flatness	Up to 161 in DL	(10 + 1.1 DL) μin	Electronic Levels Repeatometer
	UP to 0.002 in	39 μin	
Feeler Gages	0.001 in to 0.06 in	72 μin	Gage Blocks Micrometer

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Durometer Type A and Type D	Up to 100 Duro	0.62 Duro	Duro calibrator
Torque	(16 to 160) ozf·in	2.4 ozf·in	Transducers
	(10 to 100) lbf·in	2.6 lbf·in	
	(10 to 100) lbf·ft	2.6 lbf·ft	
	(100 to 1 000) lbf·ft	4 lbf·ft	

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ($k=2$), corresponding to a confidence level of approximately 95%.

Notes:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
2. L is the numerical value of the nominal length of the device being measured in inches. D is the diagonal length in inches.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-1243.



R. Douglas Leonard Jr., VP, PILR SBU

