



# 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](http://www.anab.org).

A handwritten signature in black ink, appearing to read 'R.D.L.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 04 October 2022

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, 2022**

Certificate Number: **AC-1243**

**Length – Dimensional Metrology**

<b>Parameter/Equipment</b>	<b>Range</b>	<b>Expanded Uncertainty of Measurement (+/-) <sup>2</sup></b>	<b>Reference Standard, Method, and/or Equipment</b>
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
2-4-6 Blocks Parallelism Squareness	Up to 6 in Up to 152 mm	27 µin 0.69 µm 89 µin 2.3 µm	Indi-Square
Angle Irons Parallelism Squareness	Up to 6 in Up to 152 mm	18 µin 0.5 µm 88 µin 2.2 µm	Electronic Amp Indi-Square
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 (+/-) <sup>2</sup>	Reference Standard, Method, and/or Equipment
Gage Blocks	Up to 8 in	$(3 + 5L) \mu\text{in}$	Master Gage Blocks Electronic Comparator
Dial / Digital Indicators <sup>1</sup> Resolution 0.000 05 in 0.000 1 in 0.000 5 in 0.001 in	Up to 4 in	53.2 $\mu\text{in}$ 74 $\mu\text{in}$ 292 $\mu\text{in}$ 580 $\mu\text{in}$	Gage Blocks
Test Indicator <sup>1</sup>	Up to 0.1 in Up to 0.25 mm	70 $\mu\text{in}$ 1.2 $\mu\text{m}$	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 $\mu\text{in}$ 75.6 $\mu\text{in}$ 292 $\mu\text{in}$ 580 $\mu\text{in}$	Gage Blocks
Electronic amplifiers 5 $\mu\text{in}$ resolution 0.1 $\mu\text{m}$ resolution	Up to 0.05 in Up to 1.3 mm	6 $\mu\text{in}$ 0.15 $\mu\text{m}$	Gage Blocks Surface plate
Linear Measuring Machines	Up to 40 in	$(63 + 4L) \mu\text{in}$	Gage Blocks Force Gauge
Bench Micrometer	Up to 11 in	25 $\mu\text{in}$	Gage Blocks Force Gauge
Micrometers <sup>1</sup>	Up to 40 in	$(78 + 4.2L) \mu\text{in}$	Gage Blocks
Depth Micrometers <sup>1</sup>	Up to 12 in	$(61 + 2L) \mu\text{in}$	Gage Blocks
Inside Micrometer	Up to 40 in	$(48 + 2L) \mu\text{in}$	Gage Blocks
Micrometer Head <sup>1</sup>	Up to 2 in Up to 50 mm	64 $\mu\text{in}$ 1.6 $\mu\text{m}$	Gage Blocks
Height Master	Up to 40 in	$(8 + 3L) \mu\text{in}$	Gage Block, Amp
Height Gage	Up to 40 in	$(8 + 3L) \mu\text{in}$	Gage Blocks
Intrimike	Up to 6 in Up to 152 mm	71 $\mu\text{in}$ 1.8 $\mu\text{m}$	Master Rings
Calipers / Verniers <sup>1</sup>	Up to 80 in	$(289 + 14L) \mu\text{in}$	Gage Blocks Micrometer Standards
Micrometer Standards	Up to 38 in	$(34 + 5L) \mu\text{in}$	Gage Blocks Linear measuring machines
Thread Plug Gages Major Diameter	Up to 6 in Up to 150 mm	54 $\mu\text{in}$ 1.4 $\mu\text{m}$	Bench Micrometer Gage Blocks

**Length – Dimensional Metrology**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) <sup>2</sup>	Reference Standard, Method, and/or Equipment
			Thread Measuring Wires
Pitch Diameter	Up to 6 in Up to 150 mm	99 μin 2.5 μm	
Plain Plug Gages	Up to 2 in Up to 50 mm	14 μin 0.36 μm	Gage Blocks Electronic Comparator
Plain Ring Gages	Up to 6 in Up to 150 mm	32 μin 0.81 μm	Gage Blocks Internal/External Comparator
Thread Ring Gages	Up to 6 in Up to 150 mm	76 μin 1.93 μm	Set Thread Plug Gages
Pin Gages	Up to 1 in Up to 25 mm	87 μin 1.5 μm	Gage Blocks Micrometer
Squares	Up to 18 in	(20 + 2L) μin	Amp & Probe
Levels	Up to 18 in Up to 457 mm	64 μin 1.6 μm	Gage Blocks
Granite Surface Plates <sup>1</sup> Overall Flatness Local Area Flatness	Up to 161 in DL UP to 0.002 in	(10 + 1.1 DL) μin 39 μin	Electronic Levels Repeatometer
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	Durocalibrator
Torque	(16 to 160) ozf·in (10 to 100) lbf·in (10 to 100) lbf·ft (100 to 1 000) lbf·ft	2.4 ozf·in 2.6 lbf·in 2.6 lbf·ft 4 lbf·ft	Transducers

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.



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