

#### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

# Quality Inspection Technologies (Division of 629986 Canada Ltd)

6537 Kister Rd., Unit 2 Niagara Falls, ON L2G 0B8 Darren Rasmussen 905-354-9507

### CALIBRATION AND DIMENSIONAL MEASUREMENT

Valid to: August 5, 2023 Certificate Number: L1094-1

# **CALIBRATION**

## **Length – Dimensional Metrology**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) 1	Reference Standard, Method, and/or Equipment
Micrometer Standards	Up to 29 in	$(39 + 6L) \mu in$	Telma 500 and Gauge Blocks
	(29 to 48) in	$(21 + 7.8L) \mu in$	Gauge Blocks
Plain Rings	(0.5 to 6) in	(51 + 6D) µin	
Pin Gauges	Up to 1 in	$(51 + 4.8D) \mu in$	Telma 500 and Gauge Blocks
Plug Gauges	Up to 4 in	$(49 + 5.8D) \mu in$	
Thread Wires	Up to 1 in	18 μin	Bench Micrometer Gauge, Head & Amplifier
Outside Micrometer (0.000 05 in Resolution)	(0 to 48) in	$(38 + 7.1L) \mu in$	
Outside Micrometer (0.000 1 in Resolution)	(0 to 48) in	(47 + 6.7 <i>L</i> ) μin	
Outside Micrometer (0.001 in Resolution)	(0 to 48) in	$(568 + 2.3L) \mu in$	Gauge Blocks
Depth Micrometer (0.000 05 in Resolution)	(0 to 12) in	$(54 + 5L) \mu in$	
Depth Micrometer (0.000 1 in Resolution)	(0 to 12) in	$73 + 4.3L$ ) $\mu$ in	
Depth Micrometer (0.001 in Resolution)	(0 to 12) in	$(579 + 0.7L) \mu in$	





# Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) 1	Reference Standard, Method, and/or Equipment
Inside Micrometer (0.000 1 in Resolution)	(2 to 29) in	$(64 + 7.5L) \mu in$	Telma 500 and Gauge Blocks
Inside Micrometer (0.001 in Resolution)	(2 to 29) in	$(571 + 2.2L) \mu in$	Telma 500 and Gauge Blocks
Inside Micrometer (0.000 1 in Resolution)	(30 to 80) in	$(124 + 6L) \mu in$	Gauge Blocks
Inside Micrometer (0.001 in Resolution)	(30 to 80) in	$(511 + 4L) \mu in$	Gauge Blocks
Calipers (0.000 1 in Resolution)	(0 to 48) in	$(397 + 9.6L) \mu in$	Gauge Blocks
Calipers (0.000 5 in Resolution)	(0 to 48) in	$(631 + 7.8L) \mu in$	Gauge Blocks
Dial/Digital Indicators (0.000 1 in Resolution)	(0 to 1) in	$(80 + 3.1L) \mu in$	Telma 500
Dial/Digital Indicators (0.000 5 in Resolution)	(0 to 1) in	(294 + 0.9 <i>L</i> ) μin	Telma 500
Test Indicators (0.000 1 in Resolution)	(0 to 0.4) in	(78 + 25.7 <i>L</i> ) μin	
Test Indicators (0.000 5 in Resolution)	(0 to 0.4) in	(293 + 10.2 <i>L</i> ) μin	Telma 500
Dial Bore Gauges (0.000 1 in Resolution)	(0 to 1) in travel	(91 + 4.8 <i>L</i> ) μin	
Height Gauges (0.000 5 in Resolution)	(0 to 48) in	$(562 + 3.6L) \mu in$	Mahr Comparator Gauge Blocks Surface Plate
Height Gauges (0.001 in Resolution)	(0 to 48) in	$(902 + 2.5L) \mu in$	Mahr Comparator Gauge Blocks Surface Plate
Steel Rules / Scales	(0 to 48) in	$(411 + 10.2L) \mu in$	Optical Comparator
Bevel Protractors	(0 to 180)°	0.042°	Angle Blocks and Surface Plate
Thread Plug Gauges  Major Diameter  Pitch Diameter	Up to 4 in	(52 + 4.2 <i>D</i> ) μin (171 + 3.8 <i>D</i> ) μin	Bench Micrometer Mahr Probe Thread Wires Micrometer





# DIMENSIONAL MEASUREMENT

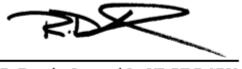
#### 3 Dimensional

Parameter	Range	Expanded Uncertainty of Measurement (+/-) 1	Reference Standard, Method and/or Equipment
Dimensional Measurement 3D	X = (0  to  36)  in Y = (0  to  40)  in Z = (0  to  24)  in	(138 + 23.3 <i>L</i> ) μin	Mitutoyo Coordinate Measuring Machine utilized as Reference Standard for Dimensional Inspection
Dimensional Measurement 3D	X = (0  to  47)  in Y = (0  to  78)  in Z = (0  to  40)  in	(130 + 21 <i>L</i> ) μin	Wenzel Coordinate Measuring Machine utilized as Reference Standard for Dimensional Inspection

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. D = diameter in inches, L = length in inches.
- 2. This scope is formatted as part of a single document including Certificate of Accreditation No. L1094-1.



R. Douglas Leonard Jr., VP, PILR SBU

