



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Accu-Calibration Services, Inc.
475 Welham Road
Barrie, Ontario L4N 8Z6 Canada

Fulfills the requirements of

ISO/IEC 17025:2017

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: 05 June 2023
Certificate Number: L2084-1



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

Accu-Calibration Services, Inc.

475 Welham Road
Barrie, Ontario L4N 8Z6 Canada
Mike Maus
705-986-2022

CALIBRATION

Valid to: **June 5, 2023**

Certificate Number: **L2084-1**

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) ²	Reference Standard, Method, and/or Equipment
Height Gages – Imperial/Metric	(0 to 24) in (0 to 600) mm	(330 + 7.4X) μin (8.1 + 6.1L) μm	JIS B 7517 using MTI Check Master
Calipers – Imperial/Metric	(0 to 12) in (0 to 300) mm	(390 + 12X) μin (7.8 + 7L) μm	JIS B 7507 using MTI Caliper Checker, Gage Blocks
Outside Micrometers – Imperial/Metric	(0 to 3) in (0 to 75) mm	(36 + 6X) μin (0.6 + 7L) μm	JIS B 7502 using Gage Blocks
	(3 to 12) in (75 to 300) mm	(77 + 15X) μin	
Indicators – Imperial/Metric	(0 to 2) in (0 to 50) mm	(38 + 21X) μin	JIS B 7503 using i-Checker
Depth Gage - Imperial/Metric	(0 to 12) in (0 to 300) mm	(430 + 14X) μin (8.4 + 8.3L) μm	JIS B 7518 using Gage Blocks
Pin Gauges: Diameter	(0.12 to 1.18) in (0.3 to 30) mm	49 μin 1.2 μm	ASME B89.1.5 using Laser Scanning Micrometer and Standard

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Torque Analyzer ¹	(6 to 60) lbf·in (5 to 50) lbf·ft (30 to 300) lbf·ft (80 to 800) lbf·ft	0.09 % of reading 0.09 % of reading 0.11 % of reading 0.13 % of reading	ASTM E2428 using Dead Weights and Torque Arm
Torque Wrench	(6 to 60) lbf·in (5 to 50) lbf·ft (30 to 300) lbf·ft (80 to 800) lbf·ft	0.32 % of reading 0.43 % of reading 0.5 % of reading 0.25 % of reading	ISO 6789:2003 using Torque Analyzer
Torque Tools ¹	(0.5 to 50) lbf·ft	3.4 % of reading	JIS B 4650 using Torque Analyzer and Joint Simulators

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 represents the length of measurand in meters, X represents the length of the measurand in inches.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. L2084-1.



R. Douglas Leonard Jr., VP, PILR SBU