

# Certificate of Calibration

THIS IS TO CERTIFY THAT UNITED TESTING SYSTEMS CANADA LTD., HAS CALIBRATED  
THE FOLLOWING DESCRIBED EQUIPMENT IN ACCORDANCE WITH  
ASTM-E83-XX AND UTS SOP-5082-Rev XX-XXX.

CERTIFICATE NUMBER: CR#0003  
CERTIFICATE ISSUED: June 5, 2019

CALIBRATION DATE: June 5, 2019  
REQUESTED DUE DATE: June 5, 2020

## CALIBRATION & CUSTOMER INFORMATION:

COMPANY:	ANY COMPANY
ADDRESS:	123 ANY STREET
CITY/PROVINCE:	ANY CITY, ANY PROVINCE
SYSTEM LOCATION:	QUALITY ASSURANCE LAB
INSTRUMENT CALIBRATED:	EXTENSOMETER
MANUFACTURER:	UNITED
MODEL:	EZ 1 - 2
SERIAL NUMBER:	XXXXX
ASSET NUMBER:	XXXXX
RECORDER USED FOR TEST:	ATTACHED COMPUTER S/N XXXXX
RESOLUTION OF RECORDER:	0.001 %STRAIN
CALIBRATION RANGE:	0.5 - 50 %STRAIN (0.01 - 1.0 in)
NOMINAL GAUGE LENGTH:	2.0000 in
MAGNIFICATION:	1:1
METHOD OF GAUGE LENGTH VERIFICATION:	DIRECT
METHOD OF ATTACHMENT TO CALIBRATOR:	AS PER MANUFACTURER'S SPECIFICATIONS
POSITION OF INSTRUMENT CALIBRATED:	VERTICAL
TEMPERATURE / HUMIDITY:	22.5 °C   35%
RECORD OF READINGS:	ATTACHED
SYSTEM CONDITION:	GOOD
READINGS AS FOUND:	IN TOLERANCE
READINGS AS LEFT:	IN TOLERANCE
CALIBRATION TECHNICIAN:	TECHNICIAN

## THE FOLLOWING N.I.S.T. TRACEABLE STANDARDS WERE USED:

	LINEAR	GAUGE LENGTH	ENVIRONMENT
STANDARD FILE:	CALIBRATOR	CALIBRATOR	RECORDER
STANDARD S/N:	LINEAR 1	CALIPER 1	TEMP-8
MANUFACTURER:	7416675D-025	0001451-020	TH20123-284
MODEL:	HEIDENHAIN	MITUTOYO	LASCAR
DATE DUE:	MT-25	500-170	EL-USB-2-LCD+
TRACEABILITY NO.:	Month Day, Year	Month Day, Year	Month Day, Year
CERTIFIED BY:	565208	555636	AC16031704-3
EXPANDED UNCERTAINTY:	ULRICH	ULRICH	ALPHA
	±(23+30L) µin (L in inches)	± 0.0007 in	0.5 °C / 5 %RH

## UNCERTAINTY:

EXPANDED UNCERTAINTIES SHOWN ABOVE USE A COVERAGE FACTOR OF K=2 FOR A CONFIDENCE LEVEL OF 95%. ALL CALIBRATION RESULTS IN THIS CERTIFICATE CONFORM TO A MINIMUM UNCERTAINTY RATIO OF 3:1 AS PER REQUIREMENTS OF ASTM-E83.

EXPANDED UNCERTAINTIES ARE VALID FOR A TEMPERATURE RANGE OF 23°C +/- 5°C.

**United Testing Systems Canada Limited** CALIBRATED BY

21 - 225 Bradwick Drive, Concord, Ontario L4K 1K7  
Tel.: (905) 669-5327 Fax: (905) 738-5051  
E-mail: service@utscanada.com

AUTHORIZED SIGNATORY

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ISO/IEC 17025 ANSI/NCSL Z540-1-1994; Part 1

Accredited by:



NVLAP Lab Code: 200311-0

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UNITED CALIBRATION GROUP



# Calibration Report

CERTIFICATE NUMBER: CR#0003  
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## CALIBRATION & CUSTOMER INFORMATION:

COMPANY: ANY COMPANY  
 INSTRUMENT CALIBRATED: EXTENSOMETER  
 SERIAL NUMBER: XXXXX

## CALIBRATION RESULTS:

OBSERVED DATA: NOTE THAT MULTIPLE RUNS ARE SHOWN SERIALLY. UNLESS OTHERWISE NOTED, THE DATA SHOWN IS 'AS FOUND / AS LEFT' WITH NO ADJUSTMENT MADE.

ACTUAL % STRAIN	EXTEN. % STRAIN	FIXED ERROR (in/in)					RELATIVE ERROR (%)					Un (k=2) %
		Error		Resolution	Repeatability		Error		Resolution	Repeatability		
		Value	Class		Value	Class	Value	Class		Value	Class	
FIRST RUN												
0.5015	0.501	0.00000	A	A	N/A	N/A	-0.100	A	B1	N/A	N/A	0.29
1.0033	1.003	0.00000	A	A	N/A	N/A	-0.025	A	B1	N/A	N/A	0.27
2.0023	2.000	-0.00002	B1	A	N/A	N/A	-0.112	B1	A	N/A	N/A	0.20
3.0033	2.998	-0.00005	B1	A	N/A	N/A	-0.175	B1	A	N/A	N/A	0.16
4.0053	3.997	-0.00008	B1	A	N/A	N/A	-0.206	B1	A	N/A	N/A	0.079
5.0110	5.004	-0.00007	B1	A	N/A	N/A	-0.140	B1	A	N/A	N/A	0.059
10.0078	10.007	-0.00001	A	A	N/A	N/A	-0.007	A	A	N/A	N/A	0.079
20.0038	20.014	0.00010	B2	A	N/A	N/A	0.051	A	A	N/A	N/A	0.019
30.1053	30.138	0.00033	C	A	N/A	N/A	0.109	B1	A	N/A	N/A	0.028
40.0058	40.073	0.00067	C	A	N/A	N/A	0.168	B1	A	N/A	N/A	0.061
50.0113	50.140	0.00129	D	A	N/A	N/A	0.257	B1	A	N/A	N/A	0.060
SECOND RUN												
0.5028	0.502	-0.00001	A	A	0.00000	A	-0.149	B1	B1	0.049	A	0.29
1.0005	0.998	-0.00002	B1	A	0.00002	A	-0.250	B1	B1	0.225	B1	0.27
2.0040	1.998	-0.00006	B1	A	0.00004	B1	-0.299	B1	A	0.187	B1	0.20
3.0120	3.002	-0.00010	B2	A	0.00005	B1	-0.332	B1	A	0.157	B1	0.16
4.0040	3.993	-0.00011	B2	A	0.00003	B1	-0.275	B1	A	0.069	A	0.079
5.0055	4.996	-0.00009	B1	A	0.00003	B1	-0.190	B1	A	0.050	A	0.059
10.0035	9.995	-0.00009	B1	A	0.00008	B1	-0.085	A	A	0.077	A	0.079
20.0050	20.012	0.00007	B1	A	0.00003	B1	0.035	A	A	0.016	A	0.019
30.0053	30.046	0.00041	C	A	0.00008	B1	0.136	B1	A	0.027	A	0.028
40.0083	40.100	0.00092	C	A	0.00024	C	0.229	B1	A	0.061	A	0.061
50.0045	50.163	0.00158	D	A	0.00030	C	0.317	B1	A	0.060	A	0.060

MEASURED GAUGE LENGTH:

1st Run 2.0005 in  
 2nd Run 2.0000 in

0.03 (%ERROR) -- CLASS A  
 0.00 (%ERROR) -- CLASS A

Un (k=2)

0.043 %  
 0.035 %

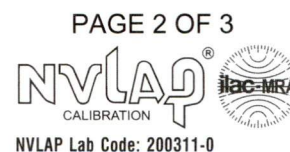
CALIBRATION FACTOR: 1  
 CLASS OF INSTRUMENT: B1

NOTES:

ISO/IEC 17025

ANSI/NCSL Z540-1-1994; Part 1

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# Calibration Report

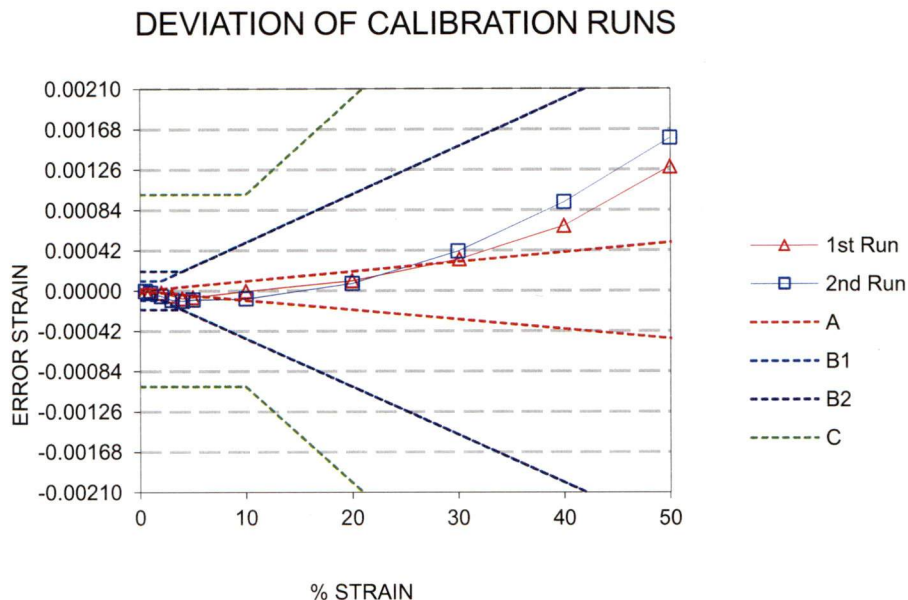
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