

# Certificate of Calibration

THIS IS TO CERTIFY THAT UNITED TESTING SYSTEMS CANADA LTD., HAS  
CALIBRATED THE FOLLOWING DESCRIBED EQUIPMENT IN ACCORDANCE  
WITH ASTM-E1012-XX AND UTS SOP-9198-Rev XX-XXXX.

CALIBRATION IS VALID FROM 1000 TO 6000 lbf AND THE MACHINE ALIGNMENT  
HAS BEEN FOUND TO MEET ASTM E-1012 CLASSIFICATION 8  
UNLESS OTHERWISE NOTED.

CERTIFICATE NUMBER: CR#0010  
CERTIFICATE ISSUED: June 5, 2019

CALIBRATION DATE: June 5, 2019

## CALIBRATION & CUSTOMER INFORMATION:

COMPANY: ANY COMPANY  
ADDRESS: 123 ANY STREET  
CITY/PROVINCE: ANY CITY, ANY PROVINCE  
SYSTEM LOCATION: Q. A. LAB  
SYSTEM CALIBRATED: UNITED STM-100KN S/N XXXXXXXX  
ASSET NUMBER(S): BBBB  
MACHINE TYPE: 1  
DIRECTION: TENSION  
CALIBRATION RANGE(S): 6000 lbf  
TEMPERATURE / HUMIDITY: 23.5 °C | 43%  
SYSTEM CONDITION: GOOD  
READINGS AS FOUND: IN TOLERANCE  
READINGS AS LEFT: IN TOLERANCE  
CALIBRATION TECHNICIAN: TECHNICIAN

## THE FOLLOWING NIST TRACEABLE STANDARDS WERE USED:

	ALIGNMENT TRANSDUCER	GAGE MEASURING EQUIPMENT	ENVIRONMENT RECORDER
STANDARD FILE:	PBAR6klbf	KEITHLEY	TEMP-1
STANDARD S/N:	UCC-AB-001-255	1335246	TH20121-282
MANUFACTURER:	UNITED	KEITHLEY	LASCAR
DATE CALIBRATED:	Month Day, Year	Month Day, Year	Month Day, Year
DATE DUE:	Month Day, Year	Month Day, Year	Month Day, Year
CERTIFIED BY:	UTS CAN STD LAB	KEITHLEY	ALPHA
TRACEABILITY NO.:	CR#16884	1324602-2011-004-05-12-56-31	AC15031766-1
CAPACITY:	6000 lbf	1000 mV	80 °C / 100 %RH
MODE:	TENSION	DMM	UNCERTAINTY
PRECISION:	N / A	0.00001 mV	N / A
UNCERTAINTY:	2.1%	0.20%	0.33 °C / 1.5 %RH

## UNCERTAINTY:

THE EXPANDED UNCERTAINTY OF THE ALIGNMENT MEASUREMENTS IS CERTIFIED TO BE LESS  
THAN 2.67% USING A COVERAGE FACTOR OF  $k = 2$  FOR A CONFIDENCE LEVEL OF 95%.

CALIBRATED BY

AUTHORIZED SIGNATORY

### United Testing Systems Canada Limited

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

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

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SYSTEM CALIBRATED: UNITED STM-100KN S/N XXXXXXXX

## CALIBRATION RESULTS:

OBSERVED DATA: MULTIPLE RUNS ARE SHOWN SERIALLY. UNLESS OTHERWISE NOTED, THE DATA SHOWN IS 'AS FOUND / AS LEFT' WITH NO ADJUSTMENT MADE. COMPUTED FORCES HAVE BEEN TEMPERATURE CORRECTED AS NECESSARY.

STANDARD I.D.	LOAD #	lbf	GAUGE LOCATION	B <sup>1</sup> (microstrain)	FIXED LIMIT	PB <sup>2</sup> (%)	R <sup>3</sup> LIMIT	CLASS	Un(k=2) %
FIRST RUN (ORIGINAL ORIENTATION)									
PBAR6klbf	1	0	TOP	87	PASS	N / A	N / A	N / A	N / A
			CENTER	92	PASS	N / A	N / A	N / A	N / A
			BBBB	119	FAIL	N / A	N / A	N / A	N / A
PBAR6klbf	2	1000	TOP	19	N / A	0.46	PASS	8	2.1
			CENTER	80	N / A	1.96	PASS	8	2.1
			BOTTOM	233	N / A	5.68	PASS	8	2.1
PBAR6klbf	3	2000	TOP	81	N / A	0.98	PASS	8	2.1
			TECHNICIAN	125	N / A	1.51	PASS	8	2.1
			BOTTOM	162	N / A	1.95	PASS	8	2.1
PBAR6klbf	4	4000	TOP	238	N / A	1.89	PASS	8	2.1
			CENTER	218	N / A	1.72	PASS	8	2.1
			BOTTOM	232	N / A	1.84	PASS	8	2.1
PBAR6klbf	5	6000	TOP	196	N / A	4.95	PASS	8	2.1
			CENTER	132	N / A	3.35	PASS	8	2.1
			BOTTOM	83	N / A	2.12	PASS	8	2.1

## SECOND RUN (180 DEGREES ORIENTATION)

PBAR6klbf	1	0	TOP	91	PASS	N / A	N / A	N / A	N / A
			CENTER	92	PASS	N / A	N / A	N / A	N / A
			BOTTOM	115	FAIL	N / A	N / A	N / A	N / A
PBAR6klbf	2	1000	TOP	13	N / A	0.32	PASS	8	2.1
			CENTER	92	N / A	2.27	PASS	8	2.1
			BOTTOM	251	N / A	6.17	PASS	8	2.1
PBAR6klbf	3	2000	TOP	63	N / A	0.76	PASS	8	2.1
			CENTER	103	N / A	1.23	PASS	8	2.1
			BOTTOM	177	N / A	2.12	PASS	8	2.1
PBAR6klbf	4	4000	TOP	218	N / A	1.72	PASS	8	2.1
			CENTER	178	N / A	1.40	PASS	8	2.1
			BOTTOM	251	N / A	1.98	PASS	8	2.1
PBAR6klbf	5	6000	TOP	177	N / A	4.51	PASS	8	2.1
			CENTER	116	N / A	2.97	PASS	8	2.1
			BOTTOM	77	N / A	1.98	PASS	8	2.1

NOTES: 1. B - MAXIMUM BENDING STRAIN.  
2. PB - PERCENT BENDING.  
3. R LIMIT - RELATIVE LIMIT.

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THIRD RUN (ORIGINAL ORIENTATION)									
PBAR6klbf	1	0	TOP	87	PASS	N / A	N / A	N / A	N / A
			CENTER	92	PASS	N / A	N / A	N / A	N / A
			BOTTOM	119	FAIL	N / A	N / A	N / A	N / A
PBAR6klbf	2	1000	TOP	19	N / A	0.46	PASS	8	2.1
			CENTER	80	N / A	1.96	PASS	8	2.1
			BOTTOM	233	N / A	5.68	PASS	8	2.1
PBAR6klbf	3	2000	TOP	81	N / A	0.98	PASS	8	2.1
			CENTER	125	N / A	1.51	PASS	8	2.1
			BOTTOM	162	N / A	1.95	PASS	8	2.1
PBAR6klbf	4	4000	TOP	238	N / A	1.89	PASS	8	2.1
			CENTER	218	N / A	1.72	PASS	8	2.1
			BOTTOM	232	N / A	1.84	PASS	8	2.1
PBAR6klbf	5	6000	TOP	196	N / A	4.95	PASS	8	2.1
			CENTER	132	N / A	3.35	PASS	8	2.1
			BOTTOM	83	N / A	2.12	PASS	8	2.1

NOTES: 1. B - MAXIMUM BENDING STRAIN.  
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