SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005
& ANSI/NCSL Z540-1-1994 & ANSI/NCSL Z540.3-2006

MOREHOUSE INSTRUMENT CO., INC.
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CALIBRATION

Valid to: April 30, 2018 Certificate Number: 1398.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations[1]:

I. Electrical – DC/Low Frequency

Parameter/Equipment	Range	CMC[2] (±)	Comments
DC Voltage –			
Electrical Calibration of Load Indicators	(0 to 4.4) mV/V	0.00002 mV/V	Load cell simulator

II. Mechanical

Parameter/Equipment	Range	CMC[2, 3] (±)	Comments
Force –			
Dead Weight Primary Standards Tension and Compression	(0.1 to 10) lbf [(0.44 to 44) N]	0.0025 %	Force Calibration including ASTM E74 Class A and AA, ISO 376 Class 00, 0.5, 1 and 2
	(10 to 100) lbf [(44 to 444) N]	0.0016 %	
	(100 to 12 0000) lbf [(444 to 53 378) N]	0.0016 %	Forces can be applied incrementally and decrementally thus permitting the determination of hysteresis errors.
	(12 000 to 120 000) lbf [(53 378 to 533 786) N]	0.0016 %	

Parameter/Equipment	Range	CMC[2, 3] (±)	Comments
Force (cont) –			
N.I.S.T Calibrated Transfer/Secondary Standards Tension and Compression	(120 000 to 1 000 000) lbf [(533 to 4448) kN]	(1.3×10^{-5})(Force Applied in lbf) + 8.6 [(9 through 22) lbf] [(40 through 98) N]	Force Calibration including ASTM E74 Class A only, ISO 376 Class 0.5, 1 and 2 Forces can be applied incrementally and decrementally thus permitting the determination of hysteresis errors.
Compression	(1 000 000 to 2 250 000) lbf [(4.4 to 10) MN]	(5.3×10^{-5})(Force Applied in lbf) + 120 [71 through 150 lbf] [(320 through 650) N]	Forces can be applied incrementally only
Tension	(1 000 000 to 1 125 000) lbf [(4.4 to 5) MN]	110 lbf [480 N]	Forces can be applied incrementally only
Aircraft Scales/Truck Scales (Portable)	(0 to 25 000) lbf (25 001 to 60 000) lbf	2.5 lbf 4.7 lbf	Force
Torque –			
Dead Weight Primary Standards	(0.74 to 73.75) lbf·ft (1 to 100) N·m	0.005 %	Primary torque standard, ASTM E2428, BS7882, and other methods.
Clockwise & Counter-clockwise	(14.75 to 1475) lbf·ft (20 to 2000) N·m	0.003 %	

[1] This laboratory offers commercial calibration service.

[2] Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC Uncertainty due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

[3] In the statement of CMC, percentages are to read as percent of the indicated value, unless otherwise noted.

Accredited Laboratory

A2LA has accredited

MOREHOUSE INSTRUMENT COMPANY., INC.

York, PA

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of ANSI/NCSLI Z540-1-1994 and the requirements of ANSI/NCSLI Z540.3-2006 and any additional program requirements in the field of calibration. 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 8 January 2009*).

Presented this 18th day of April 2016.

President and CEO
For the Accreditation Council
Certificate Number 1398.01
Valid to April 30, 2018
Revised January 5, 2017

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.