

Scope of Accreditation For C.S.C. Force Measurement Inc.

84 Ramah Circle North, P. O. Box 887
Agawam, MA 01001
Bill Post
413-789-3086

In recognition of a successful assessment to ISO/IEC 17025:2005, accreditation is granted to **C.S.C. Force Measurement Inc.** to perform the following **Calibrations**:

Accreditation granted through: **March 5, 2014**

Calibration

Mass – Scale and Balances

Calibration Parameter/Equipment ¹	Range	Calibration and Measurement Capability(+/-) ²	Remarks
Scales (0.005 lb resolution) (0.02 lb resolution) (0.05 lb resolution)	0 lb to 10 000 lb	0.087 lb 0.027 lb 0.083 lb	NIST Class F Weights and NIST Handbook 44 utilized for the calibration of the weighing system
Laboratory Balance (0.0005 g resolution) (0.005 g resolution) (0.2 g resolution)	0 kg to 12 kg	0.0023 g 0.0055 g 0.186 g	ASTM E617 Class 1 Weights and NIST Handbook 44 utilized for the calibration of the weighing system

Mass – Torque

Calibration Parameter/Equipment ¹	Range	Calibration and Measurement Capability(+/-) ²	Remarks
Torque-Source	(1 to 50) ozf-in (50 to 100) ozf-in (6 to 50) lbf-in (50 to 1 200) lbf-in (100 to 600) lbf-ft (600 to 2 000) lbf-ft	0.021 ozf-in 0.042 ozf-in 0.022 lbf-in 0.94 lbf-in 0.33 lbf-ft 1.14 lbf-ft	Direct comparison made with ASTM Class F Weights and/or load cells
Torque-Measure	(1 to 48) ozf-in (3 to 50) lbf-in (50 to 1 000) lbf-in (80 to 250) lbf-ft (250 to 600) lbf-ft (600 to 2 000) lbf-ft	1.265 ozf-in 0.841 lbf-in 3.40 lbf-in 0.74 lbf-ft 1.79 lbf-ft 6.25 lbf-ft	Digital Torque Analyzer

Mass – Force

Calibration Parameter/Equipment ¹	Range	Calibration and Measurement Capability(+/-) ²	Remarks
Force - Tension	(0.1 to 2) lbf	0.0010 lbf	Direct comparison made with ASTM Class F Weights and/or load cells
	(2 to 10) lbf	0.0041 lbf	
	(10 to 50) lbf	0.015 lbf	
	(50 to 100) lbf	0.030 lbf	
	(100 to 500) lbf	0.11 lbf	
	(500 to 2 000) lbf	0.60 lbf	
	(2 000 to 10 000) lbf	6 lbf	
	(10 000 to 50 000) lbf	11.7 lbf	
(50 000 to 100 000) lbf	46.8 lbf		
Force - Compression	(0.1 to 2) lbf	0.0010 lbf	
	(2 to 10) lbf	0.0041 lbf	
	(10 to 50) lbf	0.015 lbf	
	(50 to 100) lbf	0.030 lbf	
	(100 to 500) lbf	0.11 lbf	
	(500 to 2 000) lbf	0.60 lbf	
	(2 000 to 10 000) lbf	6 lbf	
	(10 000 to 50 000) lbf	11.7 lbf	
(50 000 to 100 000) lbf	46.8 lbf		


Electricity and Magnetism – Voltage

Calibration Parameter/Equipment	Range	Calibration and Measurement Capability(+/-) ²	Remarks
DC Voltage – Measure	(0.001 to 100) mV	0.155 μ V + 0.001 μ V/V	DMM
	(0.1 to 1) V	62.67 μ V + 183.33 μ V/V	
	(1 to 10) V	435.6 μ V + 394.4 μ V/V	
	(10 to 100) V	-46.97 mV + 5.24 mV/V	
	(100 to 1000)V	-1700.8 mV + 21.7 mV/V	

Notes:

- 1) Laboratory offers calibration services at the laboratory's own facilities and at the client or other agreed upon facilities.
- 2) Calibration and Measurement Capability represents expanded uncertainties at approximately a 95% confidence level using a coverage factor of k=2.

Approved by: _____



 R. Douglas Leonard
Chief Technical Officer

Date: _____ March 4, 2011 _____

Re-Issued: 3/4/11