

# Scope of Accreditation For B-Accurate/Div. of Brechbuhler Scales, Inc.

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In recognition of a successful assessment to ISO/IEC 17025:2005, accreditation is granted to **B-Accurate/Div. of Brechbuhler Scales, Inc.** to perform the following **Calibrations**:

Accreditation granted through: **May 7, 2013**

## Calibration

### Length - Dimensional Metrology – Hand Tools and Precision Gages 1D

Calibration Parameter/Equipment	Range	Calibration and Measurement Capability(+/-) <sup>2,3</sup>	Remarks
Length (Length/Distance functions of force measurement test stands)	1 in to 8 in	(66 + 34L) $\mu$ in	Grade 2 Gage Blocks and B- Accurate Calibration Method
	8 in to 20 in	0.00604 in	

### Mass – Scale and Balances

Calibration Parameter/Equipment	Range	Calibration and Measurement Capability(+/-) <sup>2</sup>	Remarks
Weighing Systems <sup>1</sup>			ASTM E617 Class I Weights and NIST Handbook 44 utilized for the calibration of the
0.001 g resolution	0 g to 220 g	0.5 mg	ASTM E617 Class II Weights and NIST Handbook 44 utilized for the calibration of the weighing system
0.01 g resolution	0 g to 100 g	5.8 mg	
0.02 g resolution	0 g to 200 g	12 mg	
0.1 g resolution	0 kg to 1 kg	57.8 mg	
0.1 g resolution	0 kg to 10 kg	60 mg	NIST 105 Class F Weights and NIST Handbook 44 utilized for the calibration of the weighing systems
0.0002 lb resolution	0 lb to 1 lb	0.0001 lb	
0.001 lb resolution	0 lb to 10 lb	0.0016 lb	
0.1 lb resolution	0 lb to 1000 lb	0.06 lb	
0.5 lb resolution	0 lb to 5000 lb	0.3 lb	
1 lb resolution	0 lb to 10 000 lb	0.6 lb	
20 lb resolution	0 lb to 200 000 lb	16 lb	

**Mass – Force**


Calibration Parameter/Equipment	Range	Calibration and Measurement Capability(+/-) <sup>2</sup>	Remarks
Force Gauges and Load Cells <sup>1</sup>	0.5 lbf to 200 lbf	0.07% of range	Direct Comparison to ASTM Class 6 and 7 Weights and/or Load Cells. Tension and Compression
	201 lbf to 250 lbf	0.04% of range	Load Cells Tension and Compression
	251 lbf to 1100 lbf	0.04% of range	
	1101 lbf to 2500 lbf	0.04% of range	
	2501 lbf to 10 000 lbf	0.03% of range	
	10 001 lbf to 50 000 lbf	0.06% of range	Compression Only
	50 001 lbf to 100 000 lbf	0.06% of range	

**Mass – Mass Standards**

Calibration Parameter/Equipment	Range	Calibration and Measurement Capability(+/-) <sup>2</sup>	Remarks
Mass Standards	1 g	60 µg	B-Accurate Test Procedures Derived from NIST SOP 8
	100 g	90 µg	
	300 g	300 µg	
NIST Class F	500 g	0.02 g	B-Accurate Test Procedures Derived from NIST SOP 8
	2000 g	0.03 g	
ASTM E617 Class 6	5000 g	0.2 g	
	10 000 g	0.3 g	
ASTM E617 Class 7	20 000 g	0.6 g	
	30 000 g	0.6 g	

**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.
- 3) *L* = Length in inches

Approved by:  Date: April 21, 2010  
**R. Douglas Leonard**  
 Chief Technical Officer

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