SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

BITTERMAN SCALES, LLC
2445-C Old Philadelphia Pike
Lancaster, PA 17602
Matthew Preston Phone: 717 464 3009

CALIBRATION

Valid To: February 28, 2025 Certificate Number: 6010.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations[1, 5]:

I. Mechanical

Parameter/Equipment	Range	CMC[2, 4, 6] (±)	Comments
Class I Weighing Devices[3]	Up to 30 g (> 30 to 100) g (> 100 to 220) g (> 220 to 410) g (> 410 to 1000) g (> 1000 to 5000) g (> 5000 to 6100) g	0.15 mg 0.21 mg 0.42 mg 0.73 mg (1.8 + 0.6*R*) mg (4.3 + 0.6*R*) mg (5.4 + 0.6*R*) mg	ASTM E617 Class I weights
Class II Weighing Devices[3]	(> 5000 to 25 000) g (> 25 000 to 32 000) g	(0.028 + 0.6*R*) g (0.038 + 0.6*R*) g	ASTM E617 Class I weights, ASTM E617 Class III weights
Class III Weighing Devices[3]	(> 32 to 50) kg (> 50 to 150) kg (> 150 to 400) kg (> 400 to 1000) kg (> 1000 to 2500) kg	(0.53 + 0.6*R*) g (3.0 + 0.6*R*) g (6.6 + 0.6*R*) g (40 + 0.6*R*) g (97 + 0.6*R*) g	ASTM E617 Class I weights, ASTM E617 Class III weights, NIST Class F weights.
Mass – Measure (Single Point)	25 lb 50 lb 25 kg	0.000 84 lb 0.000 84 lb 380 mg	ASTM E617 Class 1 weights

5202 Presidents Court, Suite 220 | Frederick, MD 21703-8398 | Phone: 301 644 3248 | Fax: 240 454 9449 | www.A2LA.org

[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 due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

[3] Field calibration service is available for this calibration. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g., resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.

[4] In the statement of CMC, *R* represents the resolution of the unit under test.

[5] This scope meets A2LA's *P112 Flexible Scope Policy*.

[6] The type of instrument or material being calibrated is defined by the parameter. This indicates the laboratory is capable of calibrating instruments that measure or generate the values in the ranges indicated for the listed measurement parameter.

Accredited Laboratory

A2LA has accredited

BITTERMAN SCALES, LLC

Lancaster, PA

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets R205 – Specific Requirements: Calibration Laboratory Accreditation Program. 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 April 2017*).

Presented this 20th day of January 2023.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 6010.01
Valid to February 28, 2025

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