



SCOPE OF ACCREDITATION TO ISO 17025:2017

SCALES PLUS
 4850 Allen Park Drive, Suite 1
 Allendale, MI 49401
 Ben Meyer Phone: 616 622 2100

CALIBRATION

Valid To: February 28, 2025

Certificate Number: 6896.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations^{1,9}:

I. Mechanical

Parameter/Equipment	Range	CMC ^{2,6,8} (±)	Comments
Balances ^{3,5} – (0.001 to 200 000) g	0.001 g	0.000 0076 g	ASTM Class 0 & 1 Weights
	0.002 g	0.000 0076 g	
	0.003 g	0.000 0076 g	
	0.005 g	0.000 0076 g	
	0.01 g	0.000 0076 g	
	0.02 g	0.000 0076 g	
	0.03 g	0.000 0076 g	
	0.05 g	0.000 0076 g	
	0.1 g	0.000 0076 g	
	0.2 g	0.000 0076 g	
	0.3 g	0.000 0076 g	
	0.5 g	0.000 0076 g	
	1 g	0.000 025 g	
	2 g	0.000 025 g	
	3 g	0.000 025 g	
	5 g	0.000 025 g	
	10 g	0.000 036 g	
	20 g	0.000 053 g	
	30 g	0.000 053 g	
50 g	0.000 087 g		

Parameter/Equipment	Range	CMC ^{2,6,8} (±)	Comments
Balances ^{3,5} – (cont) (0.001 to 200 000) g	100 g 200 g 300 g 500 g 1000 g 2000 g 3000 g 5000 g 10 000 g 20 000 g	0.000 19 g 0.000 36 g 0.000 55 g 0.000 87 g 0.0020 g 0.0072 g 0.011 g 0.017 g 0.036 g 0.072 g	ASTM Class 0 & 1 Weights
Industrial / Commercial Scales (Metric) ^{3,5} (1 to 600 000) g	1 g 2 g 5 g 10 g 20 g 50 g 100 g 200 g 500 g 1000 g 2000 g 5000 g 10 000 g 20 000 g 50 000 g 100 000 g 150 000 g	0.0013 g 0.0016 g 0.0022 g 0.0029 g 0.0058 g 0.014 g 0.029 g 0.058 g 0.10 g 0.15 g 0.29 g 0.73 g 1.5 g 2.9 g 7.3 g 15 g 22 g	NIST F/ ASTM 5 & 6 Weights
Industrial / Commercial Scales (avoirdupois) ^{3,5} (0.001 to 25 000) lb	0.001 lb 1/32 oz 0.002 lb 0.05 oz 1/16 oz 0.005 lb 0.1 oz 1/8 oz 0.01 lb	0.000 0022 lb 0.000 044 oz 0.000 0028 lb 0.000 051 oz 0.000 056 oz 0.000 0038 lb 0.000 066 oz 0.000 066 oz 0.000 0048 lb	NIST F/ ASTM 5 & 6 Weights

Parameter/Equipment	Range	CMC ^{2, 6, 8} (±)	Comments
Industrial / Commercial Scales (avoirdupois) ^{3, 5} (cont)			
(0.001 to 25 000) lb	0.2 oz 1/4 oz 0.02 lb 0.5 oz 0.05 lb 1 oz 0.1 lb 2 oz 0.2 lb 0.25 lb 0.5 lb 1 lb 2 lb 5 lb 10 lb 25 lb 50 lb 100 lb 200 lb 300 lb 400 lb 500 lb 600 lb 700 lb 800 lb 900 lb 1000 lb 2000 lb 3000 lb 4000 lb 5000 lb 6000 lb	0.000 081 oz 0.000 086 oz 0.000 0057 lb 0.000 14 oz 0.000 014 lb 0.000 27 oz 0.000 029 lb 0.000 56 oz 0.000 057 lb 0.000 073 lb 0.000 14 lb 0.000 22 lb 0.000 29 lb 0.000 73 lb 0.0014 lb 0.0035 lb 0.0073 lb 0.015 lb 0.029 lb 0.044 lb 0.059 lb 0.073 lb 0.088 lb 0.10 lb 0.12 lb 0.13 lb 0.14 lb 0.29 lb 0.43 lb 0.58 lb 0.72 lb 0.87 lb	NIST F/ ASTM 5 & 6 Weights

¹ This laboratory offers commercial calibration service and field calibration services.

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 The actual measurement uncertainty associated with a specific calibration performed by the laboratory will typically be larger than the CMC shown on the scope due to the resolution size and repeatability of the UUT.
- ⁵ CMC values listed are for specific test loads. Other values within the range can be obtained using multiple test weights and/or substitution methods. Each additional weight or substitution load used will result in higher measurement uncertainty.
- ⁶ In the statement of CMC, Measurement uncertainties are typically larger than the CMC shown on the scope due to additional variables.
- ⁷ Balances include, but are not limited to analytical balances, top loading balances and high precision industrial balances/scales.
- ⁸ Scales include, but are not limited to bench scales, platform scales, tank and hopper scales.
- ⁹ This scope meets A2LA's *P112 Flexible Scope Policy*.



Accredited Laboratory

A2LA has accredited

SCALES PLUS

Allendale, MI

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 16th day of February 2023.

A blue ink signature of Trace McInturff.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 6896.01
Valid to February 28, 2025

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