



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

ALLOMETRICS, INC.
2500 Bayport Blvd.
Seabrook, TX 77586
Terry Baldwin Phone: 281 474 3329

CALIBRATION

Valid To: April 30, 2019

Certificate Number: 2039.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations¹:

I. Dimensional

Parameter/Equipment	Range	CMC ² (±)	Comments
Calipers ³	Up to 12 in	740 μin	Gage blocks
Outside Micrometers ³	Up to 3 in	72 μin	Gage blocks

II. Flow

Parameter/Equipment	Range	CMC ² (±)	Comments
Air Flow – Air Velocity ³	(40 to 120) fpm (120 to 200) fpm	6.4 fpm 8.5 fpm	TSI 9565P Anemometer

III. Mechanical

Parameter/Equipment	Range	CMC ² (±)	Comments
Weighing Scales	100 g 200 g 500 g 1 kg 2 kg 5 kg 10 kg 25 kg 50 kg 100 kg 200 kg	700 µg 1.0 mg 1.9 mg 3.5 mg 6.6 mg 16 mg 34 mg 82 mg 160 mg 330 mg 67 mg	ASTM Class 1 weights
Pipettes ³	0.1 µL ≤ 0.2 µL ≤ 0.5 µL ≤ 1.0 µL ≤ 2.0 µL ≤ 5.0 µL ≤ 10 µL ≤ 20 µL ≤ 50 µL ≤ 100 µL ≤ 200 µL ≤ 500 µL ≤ 1000 µL ≤ 2000 µL ≤ 5000 µL ≤ 10 000 µL	0.033 µL 0.039 µL 0.047 µL 0.045 µL 0.053 µL 0.081 µL 0.058 µL 0.14 µL 0.13 µL 0.36 µL 0.81 µL 0.6 µL 0.9 µL 3 µL 8 µL 20 µL	Gravimetric method



Parameter/Equipment	Range	CMC ² (±)	Comments
Precision Scales and Balances ³	(1 to 500) mg 1 g 2 g 5 g 10 g 20 g 50 g 100 g 150 g 200 g 300 g 400 g 500 g 600 g 800 g 1 kg 2 kg 5 kg 10 kg	12 µg 41 µg 43 µg 44 µg 60 µg 89 µg 180 µg 340 µg 470 µg 620 µg 6.3 mg 6.2 mg 6.4 mg 6.6 mg 7.0 mg 7.4 mg 8.3 mg 16 mg 78 mg	ASTM Class 1 weights
Extrusion Plastometers ³ – Dimensional Measurements			
Cylinder Bore Diameter	(0 to 10) mm	5.8 µm	Laboratory procedure Doc. No.5-4WI05
Die Diameter	(0 to 3) mm	0.64 µm	
Piston Rod and Land Diameter, Land Length	(0 to 10) mm	3.7 µm	
Temperature	(116 to 300) °C (240 to 572) °F	0.047 °C (47 mK) 0.085 °F	
	(301 to 650) °C (573 to 1202) °F	0.076 °C (76 mK) 0.14 °F	
Load	100 g to 31.6 kg	0.1 % of nominal value	



IV. Optical Quantities

Parameter/Equipment	Range	CMC ² (±)	Comments
Optical Transmission Density – Densitometer	(0 to 3) g/cm ³	100 x 10 ⁻⁶ g/cm ³	CRM

V. Thermodynamics

Parameter/Equipment	Range	CMC ² (±)	Comments
Temperature Measuring Equipment ³	(-200 to 115) °C (-328 to 239) °F	0.032 °C (32 mK) 0.058 °F	PRT and indicator
	(116 to 300) °C (240 to 572) °F	0.047 °C (47 mK) 0.085 °F	
	(301 to 650) °C (573 to 1202) °F	0.076 °C (76 mK) 0.14 °F	
	(650 to 1000) °C (1201 to 1832) °F	0.085 °C (85 mK) 0.15 °F	

¹ This laboratory offers commercial calibration service and field 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 and this laboratory meets A2LA R104 – *General Requirements: Accreditation of Field Testing and Field Calibration Laboratories* for these calibrations. 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.





Accredited Laboratory

A2LA has accredited

ALLOMETRICS, INC.

Seabrook, TX

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 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 8 January 2009).



Presented this 29th day of September 2017.

A handwritten signature in black ink, written over a horizontal line.

President and CEO
For the Accreditation Council
Certificate Number 2039.01
Valid to April 30, 2019
Revised September 17, 2018

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