



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

CINCINNATI TEST SYSTEMS  
 10100 Progress Way  
 Harrison, OH 45030  
 Tina Marable Phone: 513 202 8229

CALIBRATION

Valid To: January 31, 2018

Certificate Number: 1667.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations<sup>1</sup>:

I. Fluid Quantities

Parameter/Equipment	Range	CMC <sup>3</sup> (±)	Comments
Flow –			
Calibration of Leak Standard (Dry Air, N <sub>2</sub> , He)	(0.5 to 50 000) scc/min	1.4 % of rdg or 0.10 scc/min whichever is greater	Comparison with precision flow meters
Calibrations of Leak Standards, Gas Flow into Vacuum or Atmosphere (Non-Flammable Gasses)	(1 × 10 <sup>-5</sup> to 5 × 10 <sup>-1</sup> ) atm-cc/sec	6.5 % of rdg	Rate of rise primary calibration system
Calibrations of Leak Standards, Gas Flow into Vacuum (He)	(1 × 10 <sup>-10</sup> to 9.9 × 10 <sup>-8</sup> ) atm-cc/sec (1 × 10 <sup>-7</sup> to 9.9 × 10 <sup>-7</sup> ) atm-cc/sec (1 × 10 <sup>-6</sup> to 9.9 × 10 <sup>-3</sup> ) atm-cc/sec	7.1 % of rdg 5.8 % of rdg 4.5 % of rdg	Mass spectrometer comparison calibration system
Calibration of Leak Standards, Gas Flow into Vacuum (He)	(1 × 10 <sup>-5</sup> to 9.9 × 10 <sup>-3</sup> ) atm-cc/sec	4.5 % of rdg	Mass spectrometer comparison calibration system – sniffer technique

Parameter/Equipment	Range	CMC <sup>3</sup> (±)	Comments
Flow- Calibration of Flow Instruments <sup>2</sup>	(50 to 20,000) scc/min	0.50 % of Full Scale	Direct comparison with Fluke Molbox 1+ and Laminar Molbloc
Pressure- Calibration of Pressure Instruments <sup>2</sup>	(-14.7 to 1000) psig	0.05 % of Full Scale	Mensor CPC6000

<sup>1</sup> This laboratory offers commercial calibration service on Leak Standards.

<sup>2</sup> This parameter applies to equipment manufactured by Cincinnati Test Systems only.

<sup>3</sup> 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.



## *Accredited Laboratory*

A2LA has accredited

**CINCINNATI TEST SYSTEMS, INC.**

*Harrison, OH*

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 any additional program requirements in the field of calibration. 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 6<sup>th</sup> day of January 2016.

A handwritten signature in black ink, appearing to read "J. C. Burnett".

Senior Director of Quality & Communications  
For the Accreditation Council  
Certificate Number 1667.01  
Valid to January 31, 2018

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