

# CERTIFICATE OF REGISTRATION



## VACUUM INSTRUMENTS CORPORATION, LLC.

2101 Ninth Avenue  
Ronkonkoma, New York 11779 USA

This laboratory is accredited in accordance with the recognized Standard ISO/IEC 17025:2017. "General Requirement for the Competence of Testing and Calibration Laboratories". This laboratory also meets the requirements of ANSI/NCSL Z540.3 2006 and any additional program requirements in the field of calibration. This accreditation demonstrates technical competence for a defined scope and the operation of laboratory quality management systems

### ISO/IEC 17025:2017

The Competence of Testing & Calibration Laboratories System is applicable to the following:

#### CALIBRATION (Supplemental Calibrations Certificate Attached)

This approval is subject to the firm maintaining its system to the required standards, which will be monitored by AGS. In the issuance of this certificate, AGS assumes no liability to any party other than the firm named above, and then only in accordance with the agreed upon Testing & Calibration Laboratories System Assessment Agreement.

Certification Number: AGS-US061820-3  
Original Approval: June 18, 2020  
Date of Issue: June 18, 2020  
Date of Expiration: June 17, 2023

A handwritten signature in black ink, appearing to read 'S. Keneally', is written over a horizontal line.

For and On Behalf of American Global Standards, LLC  
Stephen Keneally, President



# CERTIFICATE OF REGISTRATION



## Calibration Scope of Accreditation ISO/IEC 17025:2017

### VACUUM INSTRUMENTS CORPORATION, LLC.

2101 Ninth Avenue  
Ronkonkoma, New York 11779 USA

### CALIBRATION

Date of Issue: June 18, 2020 - Expiration: June 17, 2023  
Certificate Number: AGS-US061820-3

In recognition of the successful completion of the evaluation process, accreditation is granted to this laboratory to perform the following calibrations I/5:

#### I. Fluid Quantities

Parameter/Equipment	Range	CMC <sup>2,3</sup> (+)	Comments
McLeod gas displacement measuring equipment			
All Gases	( $1 \times 10^{-8}$ to $1 \times 10^{-3}$ ) atm·cm <sup>3</sup> /s	4.5%	Primary calibration systems
Helium or Hydrogen	( $1 \times 10^{-7}$ to $1 \times 10^{-3}$ ) atm·cm <sup>3</sup> /s	10 %	Sniffer leak detector
Helium only	( $1 \times 10^{-7}$ to $1 \times 10^{-3}$ ) atm·cm <sup>3</sup> /s	10 %	Mass spectrometer comparison calibration system

# CERTIFICATE OF REGISTRATION



Parameter/Equipment	Range	CMC <sup>2,3</sup> (±)	Comments
Pressure Gauge - Measuring equipment  All gases	0-2000 psig  (1x10 <sup>-3</sup> to 1x10 <sup>-1</sup> ) atm/cc/sec  (1 cc to 25 L) atm/cc/min	2.5 %	Large leak calibration system with gas expansion method
Pressure Gauge - Measuring equipment  Air	0-100 psig  (1x10 <sup>-3</sup> to 1x10 <sup>-1</sup> ) atm/cc/sec  (1 cc to 25 L) atm/cc/min	2.5%	Large leak calibration system with gas expansion method
Chronograph-Time Measuring equipment	0-500 seconds	3%	Large leak calibration system with gas expansion method
Helium Mass Spectrometer MS50 series  Helium  Argon	(1x10 <sup>-12</sup> to 1x 10 <sup>-3</sup> ) atm/cc/sec  (1x 10 <sup>-8</sup> to 1x 10 <sup>-3</sup> ) atm/cc/sec	10%  10%	Mass spectrometer comparison calibration system
Helium Mass Spectrometer MD-180  Helium	(1x10 <sup>-10</sup> to 1x 10 <sup>-3</sup> ) atm/cc/sec	10%	Mass spectrometer comparison calibration system
Helium Mass Spectrometer MD490S & MD390S  Helium & Hydrogen	(1.0 <sup>-7</sup> to 1x10 <sup>-3</sup> ) atm/cc/sec	10%	Mass spectrometer atmospheric sampling comparison calibration system

# CERTIFICATE OF REGISTRATION



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. In the statement of CMC, percentages are to be read as percent of reading unless otherwise noted.

4. 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.

5. This scope meets American Global Standards A2LA evaluation process, accreditation is granted to this laboratory to perform the calibrations listed on the annex.

