



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017
& ANSI/NCSL Z540-1-1994

HOFFER CALIBRATION SERVICES, LLC
(A SUBSIDIARY OF HOFFER FLOW CONTROLS, INC.)
107 Kitty Hawk Lane
Elizabeth City, NC 27909
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CALIBRATION

Valid To: April 30, 2024

Certificate Number: 4916.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations^{1,4}:

I. Fluid Quantities

Parameter/Equipment	Range	CMC ^{2,5,6} (±)	Comments
Volumetric Flow Rate – Measure & Measuring Equipment Light Hydrocarbons	(0.06 to 60) gpm (0.227 to 227.124) lpm	0.05 %	FDI-PDCL-60
	(0.2 to 400) gpm (0.757 to 1514.16) lpm	0.05 %	Omnitrak OT-400
	(0.06 to 60) gpm (0.227 to 227.124) lpm	0.05 %	FDI-PDCL-60
	(0.01 to 10) gpm (0.0378 to 37.854) lpm	0.05 %	MT-10
	(0.001 to 1) gpm (0.003 78 to 3.785) lpm	0.05 %	MT-01

Parameter/Equipment	Range	CMC ^{2, 5, 6} (±)	Comments
Volumetric Flow Rate – Measure & Measuring Equipment (cont)			
Water	(1.0 to 260) gpm (3.785 to 984.207) lpm	0.20 %	Transfer standard
	(0.75 to 243) gpm (2.839 to 919.855) lpm	0.20 %	
	(5.0 to 1525) gpm (18.927 to 5772.753) lpm	0.20 %	
Air	(0.03 to 200) acfm	0.30 %	CFSNC-250
Volumetric Flow Rate ³ – Measure & Measuring Equipment			
Cryogenic –			
Liquid Nitrogen, Liquid Oxygen, and Liquid Argon	(20 to 60) gpm (75.708 to 227.124) lpm	0.60 %	Prover 1"
	(20 to 130) gpm (75.708 to 492.102) lpm	0.60 %	Prover 1 1/2"
	(20 to 200) gpm (75.708 to 757.082) lpm	0.60 %	Prover 2"
Liquid Carbon Dioxide (CO ₂)	(20 to 60) gpm (75.708 to 227.124) lpm	0.40 %	Prover 1"
	(20 to 130) gpm (75.708 to 492.102) lpm	0.40 %	Prover 1 1/2"
	(20 to 200) gpm (75.708 to 757.082) lpm	0.40 %	Prover 2"

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

⁵ 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.

⁶ In the statement of CMC, percentages are percentage of reading, unless otherwise indicated.



Accredited Laboratory

A2LA has accredited

HOFFER CALIBRATION SERVICES, LLC

Elizabeth City, NC

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 the requirements of ANSI/NC SL Z540-1-1994 and 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 14th day of March 2022.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 4916.01
Valid to April 30, 2024

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