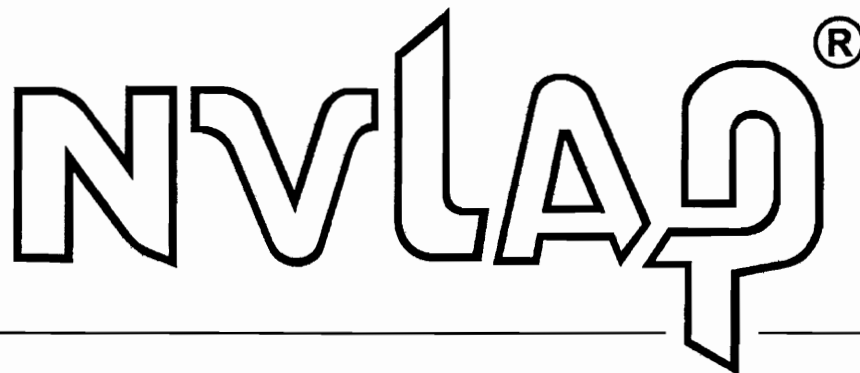


United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200668-0

Flow Dynamics, Inc.
Scottsdale, AZ

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

CALIBRATION LABORATORIES

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communique dated 18 June 2005).*

2008-10-01 through 2009-09-30

Effective dates



Sally S. Bruce
For the National Institute of Standards and Technology



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Flow Dynamics, Inc.
15555 N. 79th Place
Scottsdale, AZ 85260
Mr. Jerry Timmerman
Phone: 480-948-3789 Fax: 480-948-3610
E-mail: jtimmerman@flow-dynamics.com
URL: www.flow-dynamics.com

CALIBRATION LABORATORIES

NVLAP LAB CODE 200668-0

NVLAP Code: 20/A01 ANSI/NCSL Z540-1-1994; Part 1 Compliant

MECHANICAL

NVLAP Code: 20/M05
Flow Rate

Range	Best Uncertainty (\pm) ^{note 1}	Remarks
0.005 gpm to 10 gpm ^{note 2} 0.019 lpm to 37.9 lpm ^{note 3}	0.041 %	Flow of Liquid Hydrocarbons Piston Prover
0.25 gpm to 1500 gpm 0.95 lpm to 5678 lpm	0.025 %	Flow of Liquid Hydrocarbons Piston Prover
0.03 gpm to 30 gpm 0.11 lpm to 114 lpm	0.05 %	Flow of Water Piston Prover
0.5 gpm to 400 gpm 1.9 lpm to 1514 lpm	0.15 %	Flow of Water Turbine Meter Transfer Standard
0.000035 scfm to 1000 scfm ^{note 4} 0.001 slpm to 28 317 slpm ^{note 5}	0.2 %	Flow of Air Bell/Piston Provers

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National Voluntary Laboratory Accreditation Program



CALIBRATION LABORATORIES

NVLAP LAB CODE 200668-0

0.001 scfm to 3500 scfm 0.028 slpm to 99 109 slpm	0.25 %	Sonic Nozzle Transfer Standard
0.000035 scfm to 200 scfm 0.001 slpm to 5663 slpm	0.2 %	Flow of Inert Gasses Bell/Piston Provers
0.1 scfm to 400 scfm 2.83 slpm to 11 327 slpm	0.35 %	Sonic Nozzle Transfer Standard

1. Represents an expanded uncertainty using a coverage factor, $k = 2$, at an approximate level of confidence of 95 %.
2. US Gallons per minute.
3. Liters per minute, may also be expressed as cubic decimeters per minute.
4. Standard cubic feet per minute at standard conditions of 14.7 psia (101 353 pascals) and 70 °F (21.1 °C).
5. Standard liters per minute at standard conditions of 14.7 psia (101 353 pascals) and 70 °F (21.1 °C).

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