



World Class Accreditation

The American Association for Laboratory Accreditation

Accredited Laboratory

A2LA has accredited

RS CALIBRATION SERVICES, INC.

Pleasanton, CA

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 the requirements of ANSI/NCSL Z540-1-1994 and 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 7th day of July 2010.





Peter Meyer

President & CEO
For the Accreditation Council
Certificate Number 2220.01
Valid to April 30, 2012

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



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005
& ANSI/NCSL Z540-1-1994

RS CALIBRATION SERVICES, INC.
 1047 Serpentine Lane
 Pleasanton, CA 94566
 Mr. Ralph Sabiel Phone: 925 462 4217

CALIBRATION

Valid To: April 30, 2012

Certificate Number: 2220.01

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

I. Fluid Quantities

Parameter/Equipment	Range	CMC ² (±)	Comments
Air Flow Rate ³	(0.01 to 400) slm 5.0 sccm to 50 slm	0.2 slm 0.2 slm	DHI Molbloc, Sierra Instruments primary gas flow calibrator cal=trak SL-500 cal=trak-10, cal=trak-44

II. Mechanical

Parameter/Equipment	Range	CMC ² (±)	Comments
Pressure ³	(-30 to 30) inH ₂ O (0 to 500) psi (0 to 1) inH ₂ O (0 to 50) inH ₂ O (0 to 30) psia (0 to 300) psi (0 to 3000) psi (0 to 10 000) psi	0.004 inH ₂ O 0.003 psi 0.003 inH ₂ O 0.003 inH ₂ O 0.004 psia 0.02 psi 0.20 psi 2 psi	Ruska pressure controller Pressure modules

Peter Abney

III. Thermodynamics

Parameter/Equipment	Range	CMC ² (±)	Comments
Humidity ³	(10 to 95) % RH	1.3 % RH	Thunder Scientific 2500 generator
	(10 to 95) % RH	1.4 % RH	Vaisala HM141 w/HMP4c
Temperature – Direct Measurement by Comparison	-196 °C to 520 °C	0.041 °C	SPRT Hart Scientific 5699, superthermometer II, Hart Scientific 1590
Temperature – Direct Measurement by Comparison ³	300 °C to 1100 °C	0.65 °C	Type “S” thermocouple
	-196 °C to 420 °C	0.045 °C	PRT/RTD + meter

¹ This laboratory offers commercial calibration service.

² Calibration and Measurement Capability (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. Calibration and Measurement Capabilities 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.