



THE AMERICAN ASSOCIATION FOR
LABORATORY ACCREDITATION

ACCREDITED LABORATORY

A2LA has accredited

CALTECH SERVICE CORP.

North Olmsted, 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 15th day of June 2009.

A handwritten signature in cursive script, reading "Peter Meyer".

President
For the Accreditation Council
Certificate Number 2576.01
Valid to May 31, 2011

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

CALTECH SERVICE CORPORATION
30926 Windy Hollow Lane
North Olmsted, OH 44070
Tom Healy Phone: 440 343 4024

CALIBRATION

Valid To: May 31, 2011

Certificate Number: 2576.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations^{1,3}:

I. Electrical – DC & Low Frequency

Parameter/Equipment	Range	Best Uncertainty ² (±)	Comments
Electrical Simulation and Calibration of Thermocouples – Generate and Measure			
Type C	(260 to 1204) °C	2.1 °C	Tegam 845 Thermocouple Calibrator
Type E	(-73 to 871) °C	1.1 °C	
Type J	(38 to 760) °C	1.1 °C	
Type K	(38 to 1316) °C	1.2 °C	
Type R	(538 to 1704) °C	2.1 °C	
Type S	(538 to 1704) °C	2.1 °C	
Type T	(-73 to 371) °C	1.1 °C	

Parameter/Equipment	Range	Best Uncertainty ² (±)	Comments
DC Voltage – Generate Measure	(0 to 100) mV (0 to 90) mV	0.076 mV 0.072 mV	Fluke 725 multi-function calibrator
DC Current – Generate Measure	(0 to 24) mA (0 to 24) mA	0.019 mA 0.019 mA	Fluke 725 multi-function calibrator

II. Thermodynamics

Parameter/Equipment	Range	Best Uncertainty ² (±)	Comments
Temperature Measurement	(38 to 1204) °C	1.6 °C	Data logger and Type “K” thermocouple

¹ This laboratory offers commercial field calibration services.

² “Best Uncertainty” 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 of nearly ideal measuring equipment. Best uncertainties represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The best uncertainty of a specific calibration performed by the laboratory may be greater than the best uncertainty 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 uncertainties achievable on a customer's site can normally be expected to be larger than the Best Measurement Capabilities (BMC) that the accredited laboratory has been assigned as Best Uncertainty 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 uncertainty introduced by the item being calibrated, (e.g. resolution) must also be considered and this, on its own, could result in the calibration uncertainty being larger than the BMC.