

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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SATELLITE LOCATIONS

South Region 3955 World Houston Pkwy Suite 170 Houston, TX 77032 Central Region 50 Lakeview Pkwy Suites 116-117 Vernon Hills, IL 60061 West Region 2824 Columbia St Torrance, CA 90503

CALIBRATION

Valid To: June 30, 2022

Certificate Number: 2697.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory and to the noted satellite locations to perform the following calibrations^{1, 5}:

I. Fluid Quantities

Parameter/Equipment	Range	CMC ^{2, 4} (±)	Comments
Viscosity ³ – Kinematic (SVM)			Internal calibration procedure
(20 to 40) °C	< 10 mm ² /s (10 to 100) mm ² /s (> 100 to 1000) mm ² /s (> 1000 to 10 000) mm ² /s (> 10 000 to 100 000) mm ² /s	0.25 % 0.33 % 0.42 % 0.55 % 0.63 %	Note: calibration typically performed at 40 °C
Rotational			
20 °C	(1350 to 1650) mPa·s	13 mPa·s	Note: calibration typically performed at
25 °C	(990 to 1210) mPa·s	12 mPa·s	20 °C.

(A2LA Cert. No. 2697.01) 05/19/2020

1.

Parameter/Equipment	Range	$CMC^{2}(\pm)$	Comments
Density with U-Tube Technology ³ – (15 to 40) °C	(650 to 1800) kg/m ³	0.05 kg/m ³	Internal calibration procedure Note: calibration typically performed at 20 °C

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 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.

⁴ In the statement of CMC, percentages are percentage of reading, unless otherwise indicated.

⁵ This scope meets A2LA's *P112 Flexible Scope Policy*.

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Accredited Laboratory

A2LA has accredited

ANTON PAAR USA, INC.

Ashland, VA

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 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 19th day of May 2020.

Vice President, Accreditation Services For the Accreditation Council Certificate Number 2697.01 Valid to June 30, 2022