



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ANTON PAAR USA, INC.
 10215 Timber Ridge Drive
 Ashland, VA 23005
 Dalton Echard Phone: 804 550 1051

CALIBRATION

Valid To: July 31, 2024

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 calibrations¹:

I. Fluid Quantities

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
Viscosity ³ – Kinematic (SVM) (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 %	USQ04AW04 or USQ04AW05 – internal calibration procedure Note: calibration typically performed at 40 °C
Rotational 20 °C	(1350 to 1650) mPa·s	13 mPa·s	USQ04AW03 – note: calibration typically performed at 20 °C.
25 °C	(990 to 1210) mPa·s	12 mPa·s	

Parameter/Equipment	Range	CMC ² (±)	Comments
Density with U-Tube Technology ³ – (15 to 40) °C	(650 to 1800) kg/m ³	0.05 kg/m ³	USQ04AW01 or USQ04AW02 – internal calibration procedure Note: calibration typically performed at 20 °C



Satellite Laboratory

ANTON PAAR USA, INC.
 South Region
 3955 World Houston Pkwy, Ste I-70
 Houston, TX 77032
 Dalton Echard Phone: 804 550 1051

I. Fluid Quantities

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
Viscosity ³ – Kinematic (SVM) (20 to 40) °C Rotational 20 °C 25 °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 (1350 to 1650) mPa·s (990 to 1210) mPa·s	0.25 % 0.33 % 0.42 % 0.55 % 0.63 % 13 mPa·s 12 mPa·s	USQ04AW04 or USQ04AW05 – internal calibration procedure Note: calibration typically performed at 40 °C USQ04AW03 – note: calibration typically performed at 20 °C.
Density with U-Tube Technology ³ – (15 to 40) °C	(650 to 1800) kg/m ³	0.05 kg/m ³	USQ04AW01 or USQ04AW02 – internal calibration procedure Note: calibration typically performed at 20 °C



Satellite Laboratory

ANTON PAAR USA, INC.
 Central Region
 50 Lakeview Pkwy
 Suites 116 – 117
 Vernon Hills, IL 60006
 Dalton Echard Phone: 804 550 1051

I. Fluid Quantities

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
Viscosity ³ – Kinematic (SVM) (20 to 40) °C Rotational 20 °C 25 °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 (1350 to 1650) mPa·s (990 to 1210) mPa·s	0.25 % 0.33 % 0.42 % 0.55 % 0.63 % 13 mPa·s 12 mPa·s	USQ04AW04 or USQ04AW05 – internal calibration procedure Note: calibration typically performed at 40 °C USQ04AW03 – note: calibration typically performed at 20 °C.
Density with U-Tube Technology ³ – (15 to 40) °C	(650 to 1800) kg/m ³	0.05 kg/m ³	USQ04AW01 or USQ04AW02 – internal calibration procedure Note: calibration typically performed at 20 °C



Satellite Laboratory

ANTON PAAR USA, INC.
 West Region
 2824 Columbia St
 Torrance, CA 90503
 Dalton Echard Phone: 804 550 1051

I. Fluid Quantities

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
Viscosity ³ – Kinematic (SVM) (20 to 40) °C Rotational 20 °C 25 °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 (1350 to 1650) mPa·s (990 to 1210) mPa·s	0.25 % 0.33 % 0.42 % 0.55 % 0.63 % 13 mPa·s 12 mPa·s	USQ04AW04 or USQ04AW05 – internal calibration procedure Note: calibration typically performed at 40 °C USQ04AW03 – note: calibration typically performed at 20 °C.
Density with U-Tube Technology ³ – (15 to 40) °C	(650 to 1800) kg/m ³	0.05 kg/m ³	USQ04AW01 or USQ04AW02 – internal calibration procedure Note: calibration typically performed at 20 °C



Satellite Laboratory

ANTON PAAR Canada
 Central Region
 4920 Place Oliva
 Montreal, QC H4R 2Z8
 Dalton Echard Phone: 804 550 1051

I. Fluid Quantities

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
Viscosity ³ – Kinematic (SVM) (20 to 40) °C Rotational 20 °C 25 °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 (1350 to 1650) mPa·s (990 to 1210) mPa·s	0.25 % 0.33 % 0.42 % 0.55 % 0.63 % 13 mPa·s 12 mPa·s	USQ04AW04 or USQ04AW05 – internal calibration procedure Note: calibration typically performed at 40 °C USQ04AW03 – note: calibration typically performed at 20 °C.
Density with U-Tube Technology ³ – (15 to 40) °C	(650 to 1800) kg/m ³	0.05 kg/m ³	USQ04AW01 or USQ04AW02 – 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. 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.





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 12th day of April 2022.

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

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2697.01
Valid to July 31, 2024
Revised June 20, 2024



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