SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

EQUALX PTY LTD.
Unit 7, Roodebloem Office Park
20 Bela Rosa Street
Bellville, Cape Town, SOUTH AFRICA 7560
Janette Wassung Phone: 278 362 77636

CALIBRATION

Valid To: November 30, 2023 Certificate Number: 6433.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations[1]:

I. Mechanical

Parameter/Equipment	Range	CMC[2, 4] (±)	Comments
POVA Volume Determination/ Photometric Instrument[3] (Artel PCS®) (Pipettes & Syringes)	1.0 µL 2.0 µL 5.0 µL 10.0 µL 20.0 µL 50.0 µL 100.0 µL 200.0 µL 300.0 µL 500.0 µL 1000.0 µL	0.0041 µL 0.0089 µL 0.022 µL 0.037 µL 0.073 µL 0.23 µL 0.47 µL 0.67 µL 1.0 µL 1.7 µL 3.4 µL	ISO 8655 part 7 (v2005); Fixed-volume, variable-volume, and multi-channel pipette calibration available

[1] This laboratory offers commercial dimensional testing, calibration, and field calibration services.

[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 Calibration and Measurement Capability Uncertainty (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 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] The contributions from the "best existing device" are not included in the CMC claim. The reported expanded uncertainty associated with the calibration will include the contributor for the pipette imprecision and will, therefore, be larger than the CMC. Additionally, the Welch-Satterthwaite equation will be utilized to account for degrees of freedom from both Type A analysis and Type B analysis which will result in a k factor will be greater than k = 2.

Accredited Laboratory

A2LA has accredited

EQUALX PTY LTD

Bellville, Cape Town, SOUTH AFRICA

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 the requirements of 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 15th day of October 2021.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 6433.01
Valid to November 30, 2023

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