



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

Schuler Scientific Testing and Calibration Laboratory

2860 South Vallejo Street, Unit A&B, Englewood, CO 80110

(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2017

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

> Mass, Force and Weighing Device (As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

President

Perry Johnson Laboratory Accreditation, Inc. (PJLA) 755 W. Big Beaver, Suite 1325 Troy, Michigan 48084

Initial Accreditation Date: Issue Date:

February 23, 2019 April 13, 2021 June 30, 2023

Revision Date: Accreditation No.: Certificate No.: September 6, 2021 102586 L21-244-R2

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjlabs.com

Expiration Date:





Certificate of Accreditation: Supplement

Schuler Scientific Testing and Calibration Laboratory

2860 South Vallejo Street, Unit A&B, Englewood, CO 80110 Contact Name: Lynsey Capra Phone: 800-539-1886

Accreditation is granted to the facility to perform the following calibrations:

Mass, Force and Weighing Device

| MEASURED INSTRUMENT, QUANTITY OR GAUGE | RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE | CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±) | CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED |
|-----------------------------------------------|---------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Micro-Balances and Ultra-Micro-Balances FO | Up to 50 g | $(1 \times 10^{-4} + 6.2 \times 10^{-7} \text{Wt}) \text{ g}$ | Class E1 weights 1 mg to 50 g (EURAMET 18 V4) |
| Semi-Micro Balances FO | Up to 120 g | $(1 \times 10^{-4} + 6.32 \times 10^{-7} \text{Wt}) \text{ g}$ | Class E1 weights 1 mg to 120 g (EURAMET 18 V4) |
| Analytical Balances FO | Up to 500 g | $(2 \times 10^{-3} + 1.63 \times 10^{-6} \text{Wt}) \text{ g}$ | Class E2 weights 1 mg to 500 g (EURAMET 18 V4) |
| Top Loading Laboratory Balances FO | Up to 30 kg | $(1.2 \times 10^{-3} + 5.74 \times 10^{-6} \text{Wt}) \text{ g}$ | Class F1 weights 1 mg to 10 kg Class F1 weight 20 kg (EURAMET 18 V4) |
| Top Loading Industrial Scales FO | Up to 30 kg | $(0.116 + 1 \times 10^{-10} \text{Wt}) \text{ g}$ | Class F1 weights 1 mg to 10 kg Class F1 weights 20kg (EURAMET 18 V4) |
| Industrial scales FO | Up to 60 kg | $(0.116 + 1.67 \text{ X}10^{-5}\text{Wt}) \text{ g}$ | Class F2 weights 10 kg, 20 kg, 50 kg (EURAMET 18 V4) |
| E2 Weights ^F | 10 g 20 g 50 g 100 g 200 g 500 g 1 kg | 0.02 mg 0.02 mg 0.03 mg 0.05 mg 0.1 mg 0.25 mg 0.5 mg | UMA 1000 Class E1 weights 10g to 1kg (PW03) |





Certificate of Accreditation: Supplement

Schuler Scientific Testing and Calibration Laboratory

2860 South Vallejo Street, Unit A&B, Englewood, CO 80110 Contact Name: Lynsey Capra Phone: 800-539-1886

Accreditation is granted to the facility to perform the following calibrations:

Mass, Force, and Weighing Devices

| MEASURED INSTRUMENT, QUANTITY OR GAUGE | RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE | CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±) | CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED |
|----------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------|
| F1 Weights ^F | 10 g | 0.06 mg | UMA 1000 Class E1 weights |
| | 20 g | 0.08 mg | |
| | 50 g | 0.1 mg | 10g to 1kg (PW03) |
| | 100 g | 0.16 mg | (32) |
| | 200 g | 0.33 mg | |
| | 500 g | 0.8 mg | |
| | 1 kg | 1.6 mg | |
| F2 Weights ^F | 10 g | 0.2 mg | |
| | 20 g | 0.2 mg | |
| | 50 g | 0.3 mg | |
| | 100 g | 0.5 mg | |
| | 200 g | 1 mg | |
| | 500 g | 2.5 mg | |
| | 1 kg | 5 mg | |
| F1 Weights ^F | 1 kg | 1.6 mg | APP 30.4Y.KO Class E1 weight 1kg Class E2 weights 2kg to 20kg (PW03) |
| | 2 kg | 3.3 mg | |
| | 5 kg | 8 mg | |
| | 10 kg | 17 mg | |
| | 20 kg | 35 mg | |
| F2 Weights ^F | 1 kg | 5 mg | |
| | 2 kg | 10 mg | |
| | 5 kg | 25 mg | |
| | 10 kg | 50 mg | |
| | 20 kg | 100 mg | |
| M1 Weights ^F | 1 kg | 17 mg | |
| | 2 kg | 34 mg | |
| | 5 kg | 83 mg | |
| | 10 kg | 160 mg | |
| | 20 kg | 350 mg | 1 |
| M2 Weights ^F | 1 kg | 50 mg | |
| | 2 kg | 100 mg | |
| | 5 kg | 250 mg | |
| | 10 kg | 350 mg | |
| | 20 kg | 500 mg | |





Certificate of Accreditation: Supplement

Schuler Scientific Testing and Calibration Laboratory

2860 South Vallejo Street, Unit A&B, Englewood, CO 80110 Contact Name: Lynsey Capra Phone: 800-539-1886

Accreditation is granted to the facility to perform the following calibrations:

- 1. The CMC (Calibration and Measurement Capability) stated for calibrations included on this scope of accreditation represents the smallest measurement uncertainty attainable by the laboratory when performing a more or less routine calibration of a nearly ideal device under nearly ideal conditions. It is typically expressed at a confidence level of 95 % using a coverage factor k (usually equal to 2). The actual measurement uncertainty associated with a specific calibration performed by the laboratory will typically be larger than the CMC for the same calibration since capability and performance of the device being calibrated and the conditions related to the calibration may reasonably be expected to deviate from ideal to some degree.
- 2. The laboratories range of calibration capability for all disciplines for which they are accredited is the interval from the smallest calibrated standard to the largest calibrated standard used in performing the calibration. The low end of this range must be an attainable value for which the laboratory has or has access to the standard referenced. Verification of an indicated value of zero in the absence of a standard is common practice in the procedure for many calibrations but by its definition it does not constitute calibration of zero capacity.
- 3. The presence of a superscript FO means that the laboratory performs calibration of the indicated parameter both at its fixed location and onsite at customer locations. Example: Outside Micrometer^{FO} would mean that the laboratory performs this calibration at its fixed location and onsite at customer locations.
- 4. Measurement uncertainties obtained for calibrations performed at customer sites can be expected to be larger than the measurement uncertainties obtained at the laboratories fixed location for similar calibrations. This is due to the effects of transportation of the standards and equipment and upon environmental conditions at the customer site which are typically not controlled as closely as at the laboratories fixed location.
- 5. The term Wt represents weight in pounds or grams (including SI multiple and submultiple units) appropriate to the uncertainty statement.