



# CERTIFICATE OF ACCREDITATION

## ANSI-ASQ National Accreditation Board

500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

**Kanawha Scales and Systems, Inc.**

**35 Haas Drive**

**Englewood, OH 45322**

has been assessed by ANAB  
and meets the requirements of international standard

**ISO/IEC 17025:2005**

while demonstrating technical competence in the fields of

**CALIBRATION**

Refer to the accompanying Scope of Accreditation for information regarding the types of calibrations and/or tests to which this accreditation applies.

L1166.02-1

Certificate Number



ANAB Approval

Certificate Valid: 03/52/2018-03/27/2019  
Version No. 002 Issued: 03/15/2018



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. 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).



**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005**

**Kanawha Scales and Systems, Inc.**

35 Haas Drive  
 Englewood, OH 45322  
 Lara Miller 304-755-8321

**CALIBRATION**

Valid to: **March 27, 2019**

Certificate Number: **L1166.02-1**

**Mass**

| Parameter / Equipment       | Range           | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method and/or Equipment  |
|-----------------------------|-----------------|---|--|
| Precision Scales & Balances |                 |   | ASTM E617 Class 1 Weights and NIST Handbook 44 utilized for the calibration of the Weighing System |
| (0.000 001 g Resolution)    | (0-5.1) g       | 0.140 mg                                  |  |
| (0.000 01 g Resolution)     | (0 to 210) g    | 0.640 mg                                  |  |
| (0.000 1 g Resolution)      | (0 to 100) g    | 0.541 mg                                  |  |
| (0.000 1 g Resolution)      | (0 to 210) g    | 0.931 mg                                  |  |
| (0.000 1 g Resolution)      | (0 to 400) g    | 1.579 mg                                  |  |
| (0.001 g Resolution)        | (0 to 100) g    | 0.000 8 g                                 |  |
| (0.001 g Resolution)        | (0 to 510) g    | 0.001 6 g                                 |  |
| (0.002 g Resolution)        | (0 to 200) g    | 0.001 7 g                                 |  |
| (0.005 g Resolution)        | (0 to 500) g    | 0.004 3 g                                 |  |
| (0.01 g Resolution)         | (0 to 1000) g   | 0.009 g                                   |  |
| (0.01 g Resolution)         | (0 to 12 100) g | 0.035 g                                   |  |
| (0.02 g Resolution)         | (0 to 2000) g   | 0.017 g                                   |  |
| (0.05 g Resolution)         | (0 to 5000) g   | 0.043 g                                   |  |
| (0.1 g Resolution)          | (0 to 10 000) g | 0.09 g                                    |  |
| (0.1 g Resolution)          | (0 to 60 000) g | 0.19 g                                    |  |

**Mass**

| <b>Parameter / Equipment</b>                 | <b>Range</b>      | <b>Expanded Uncertainty of Measurement (+/-)</b> | <b>Reference Standard, Method and/or Equipment</b>   |
|--|-------------------|--|--|
| <b>Precision Scales &amp; Balances</b>       |                   |  | ASTM E617 Class 2 Weights and NIST Handbook 44 utilized for the calibration of the Weighing System                     |
| (0.2 g Resolution)                           | (0 to 20 000) g   | 0.17 g   |  |
| (0.5 g Resolution)                           | (0 to 50 000) g   | 0.43 g   |  |
| (1 g Resolution)                             | (0 to 70 000) g   | 0.76 g   |  |
| <b>Industrial Vehicle Scales<sup>2</sup></b> |                   |  | NIST Class F and/or ASTM E617 Class 6 Weights and NIST Handbook 44 utilized for the calibration of the Weighing System |
| (20 lb Resolution)                           | (0 to 200 000) lb | 14 lb  |  |
| (50 lb Resolution)                           | (0 to 500 000) lb | 36 lb  |  |
| (100 lb Resolution)                          | (0 to 500 000) lb | 71 lb  |  |
| (200 lb Resolution)                          | (0 to 500 000) lb | 141 lb   |  |
| <b>Industrial Scales<sup>2</sup></b>         |                   |  | NIST Class F and/or ASTM E617 Class 6 Weights and NIST Handbook 44 utilized for the calibration of the Weighing System |
| (0.000 2 lb Resolution)                      | (0 to 2) lb       | 0.000 29 lb                                      |  |
| (0.000 5 lb Resolution)                      | (0 to 5) lb       | 0.000 71 lb                                      |  |
| (0.001 lb Resolution)                        | (0 to 10) lb      | 0.001 4 lb                                       |  |
| (0.002 lb Resolution)                        | (0 to 20) lb      | 0.002 8 lb                                       |  |
| (0.005 lb Resolution)                        | (0 to 50) lb      | 0.012 lb   |  |
| (0.01 lb Resolution)                         | (0 to 100) lb     | 0.014 lb   |  |
| (0.02 lb Resolution)                         | (0 to 200) lb     | 0.028 lb   |  |
| (0.05 lb Resolution)                         | (0 to 500) lb     | 0.059 lb   |  |
| (0.1 lb Resolution)                          | (0 to 1 000) lb   | 0.12 lb  |  |
| (0.2 lb Resolution)                          | (0 to 2 000) lb   | 0.24 lb  |  |
| (0.5 lb Resolution)                          | (0 to 5000) lb    | 0.5 lb   |  |
| (1 lb Resolution)                            | (0 to 10 000) lb  | 1 lb   |  |

**Mass**

| Parameter / Equipment | Range             | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method and/or Equipment  |
|-----------------------|-------------------|---|--|
| (2 lb Resolution)     | (0 to 20 000) lb  | 2 lb                                      | NIST Class F and/or ASTM E617 Class 6 Weights and NIST Handbook 44 utilized for the calibration of the Weighing System |
| (5 lb Resolution)     | (0 to 50 000) lb  | 4.3 lb                                    |  |
| (10 lb Resolution)    | (0 to 100 000) lb | 9 lb                                      |  |

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ( $k=2$ ), corresponding to a confidence level of approximately 95%.

Notes:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope
2. Industrial Scales include but not limited to lab balances, bench and floor scales, tank and hopper scales and vehicle scales
3. Laboratory offers custom (specific scale) uncertainty budget when requested by client
4. This scope is formatted as part of a single document including Certificate of Accreditation No. L1166.02-1.




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Vice President

