CERTIFICATE OF ACCREDITATION

ANSI National Accreditation Board

11617 Coldwater Road, Fort Wayne, IN 46845 USA

This is to certify that

Kanawha Scales and Systems, Inc.
5525 Chantry Drive
Columbus, OH 43232

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

ISO/IEC 17025:2017

while demonstrating technical competence in the field of

CALIBRATION

Refer to the accompanying Scope of Accreditation for information regarding the types of activities to which this accreditation applies

L1166.06-1
Certificate Number

ANAB Approval

Certificate Valid Through: 03/27/2021
Version No. 003 Issued: 03/26/2019

This laboratory 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 (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

ANSI National Accreditation Board

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Kanawha Scales and Systems, Inc.
5525 Chantry Drive
Columbus, OH 43232
Alex Padon
304-464-5312

CALIBRATION

Valid to: **March 27, 2021** Certificate Number: **L1166.06-1**

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Weighing Systems (0.000 1 g Resolution)	Up to 25 g	0.000 18 g	ASTM E617 Class 1 Weights and NIST Handbook 44 utilized for the calibration of the Weighing System
(0.000 1 g Resolution)	(25 to 50) g	0.000 19 g	
(0.000 1 g Resolution)	(50 to 100) g	0.000 32 g	
(0.000 1 g Resolution)	(50 to 200) g	0.000 59 g	
(0.000 2 g Resolution)	Up to 50 g	0.0002 9 g	
(0.000 2 g Resolution)	(50 to 200) g	0.0006 3 g	
(0.000 5 g Resolution)	Up to 200 g	0.000 87 g	
(0.001 g Resolution)	Up to 100 g	0.001 3 g	
(0.001 g Resolution)	(100 to 200) g	0.001 4 g	
(0.002 g Resolution)	Up to 200 g	0.002 6 g	
(0.002 g Resolution)	(100 to 500) g	0.002 9 g	
(0.005 g Resolution)	Up to 500 g	0.006 6 g	
(0.005 g Resolution)	(500 to 1 000) g	0.007 1 g	
(0.01 g Resolution)	Up to 1 000 g	0.013 g	
(0.01 g Resolution)	(1 000 to 10 000) g	0.032 g	

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Weighing Systems (0.02 g Resolution)	Up to 2 000 g	0.026 g	ASTM E617 Class 1 Weights and NIST Handbook 44 utilized for the calibration of the Weighing System
(0.02 g Resolution)	(2 000 to 5 000) g	0.029 g	
(0.1 g Resolution)	Up to 10 000 g	0.13 g	
(0.1 g Resolution)	(10 000 to 50 000) g	0.19 g	
(0.2 g Resolution)	Up to 20 000 g	0.26 g	
(0.2 g Resolution)	(20 000 to 50 000) g	0.3 g	
(0.5 g Resolution)	Up to 25 000) g	0.65 g	
(0.5 g Resolution)	(25 000 to 50 000) g	0.66 g	
(0.000 1 g Resolution)	Up to 25 g	0.000 22 g	ASTM E617 Class 2 Weights and NIST Handbook 44 utilized for the calibration of the Weighing System
(0.000 1 g Resolution)	(25 to 50) g	0.000 32 g	
(0.000 1 g Resolution)	(50 to 100) g	0.000 59 g	
(0.000 1 g Resolution)	Up to 200 g	0.001 16 g	
(0.000 2 g Resolution)	Up to 50 g	0.000 39 g	
(0.000 2 g Resolution)	(50 to 200) g	0.001 18 g	
(0.000 5 g Resolution)	Up to 100) g	0.000 87 g	
(0.000 5 g Resolution)	(100 to 200) g	0.001 32 g	
(0.001 g Resolution)	Up to 50 g	0.001 32 g	
(0.001 g Resolution)	(50 to 100) g	0.001 4 g	
(0.005 g Resolution)	Up to 100 g	0.006 5 g	
(0.005 g Resolution)	(100 to 200) g	0.006 6 g	
(0.005 g Resolution)	(200 to 500) g	0.007 1 g	
(0.000 2 lb Resolution)	Up to 2 lb	0.000 35 lb	

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Weighing Systems (0.000 5 lb Resolution)	Up to 5 lb	0.000 87 lb	NIST Class F and/or ASTM E617 Class 6 Weights and NIST Handbook 44 utilized for the calibration of the Weighing System
(0.001 lb Resolution)	Up to 10) lb	0.001 7 lb	
(0.002 lb Resolution)	Up to 20 lb	0.003 5 lb	
(0.005 lb Resolution)	Up to 50 lb	0.008 7 lb	
(0.01 lb Resolution)	Up to 100 lb	0.017 lb	
(0.02 lb Resolution)	Up to 200 lb	0.035 lh	
(0.05 lb Resolution)	Up to 500 lb	0.078 lb	
(0.1 lb Resolution)	Up to 1 000 lb	0.16 lb	
(0.2 lb Resolution)	Up to 2 000 lb	0.31 lb	
(0.5 lb Resolution)	Up to 5 000 lb	0.71 lb	
(1 lb Resolution)	Up to 5 000 lb	1.3 lb	
(1 lb Resolution)	(5 000 to 10 000) lb	1.4 lb	
(2 lb Resolution)	Up to 10 000 lb	2.6 lb	
(2 lb Resolution)	(10 000 to 20 000) lb	2.8 lb	
(5 lb Resolution)	Up to 50 000 lb	6.6 lb	
(10 lb Resolution)	Up to 100 000 lb	13.2 lb	
(20 lb Resolution)	Up to 200 000 lb	26 lb	
(50 lb Resolution)	Up to 500 000 lb	65.2 lb	
(100 lb Resolution)	Up to 500 000 lb	129.4 lb	
(200 lb Resolution)	Up to 500 000 lb	258.5 lb	
(0.001 g Resolution)	Up to 10 g	0.001 7 g	
(0.002 g Resolution)	Up to 20 g	0.003 5 g	
(0.005 g Resolution)	Up to 50 g	0.008 7 g	
(0.01 g Resolution)	Up to 100 g	0.017 g	
(0.02 g Resolution)	Up to 200 g	0.035 g	

ANSI National Accreditation Board

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Weighing Systems (0.05 g Resolution)	Up to 500 g	0.087 g	NIST Class F and/or ASTM E617 Class 6 Weights and NIST Handbook 44 utilized for the calibration of the Weighing System
(0.1 g Resolution)	Up to 1 000 g	0.17 g	
(0.2 g Resolution)	Up to 2 000 g	0.35 g	
(0.5 g Resolution)	Up to 5 000 g	0.87 g	
(1 g Resolution)	Up to 1 000 g	1.7 g	
(2 g Resolution)	Up to 20 000 g	3.5 g	
(5 g Resolution)	Up to 50 000 g	8.7 g	
(10 g Resolution)	Up to 100 000 g	17.3 g	
(20 g Resolution)	Up to 200 000 g	31.1 g	
(50 g Resolution)	Up to 500 000 g	77.7 g	
(0.1 kg Resolution)	Up to 1 000 kg	0.16 kg	
(0.2 kg Resolution)	Up to 2 000 kg	0.28 kg	
(0.5 kg Resolution)	Up to 5 000 kg	0.71 kg	
(1 kg Resolution)	Up to 10 000 kg	1.4 kg	
(2 kg Resolution)	Up to 20 000 kg	2.8 kg	
(5 kg Resolution)	Up to 50 000 kg	6.6 kg	
(10 kg Resolution)	Up to 100 000 kg	13.2 kg	

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 includes but not limited to lab balances, bench scales, 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. L1166.06-1.

Vice President