



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

**Memphis Scale Works, Inc., a division of
Kanawha Scales & Systems**

**3418 Cazassa Road
Memphis, TN 38116**

(and the satellite locations listed on the scope)

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

CALIBRATION

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

A handwritten signature in black ink, appearing to be 'J. Stine', is positioned above a horizontal line.

Jason Stine, Vice President

Expiry Date: 17 August 2026

Certificate Number: AC-1132



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).



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

**Memphis Scale Works, Inc.,
a division of Kanawha Scales & Systems**
3418 Cazassa Road, Memphis, TN 38116
Candice Bryant 304-755-8321

Satellite Locations:

**Memphis Scale Works, Inc.,
a division of Kanawha Scales & Systems**
3212 Herb Street
Jonesboro, AR 72401

**Memphis Scale Works, Inc.,
a division of Kanawha Scales & Systems**
314 Lake Lane Suite B
Little Rock, AR 72117

**Memphis Scale Works, Inc.,
a division of Kanawha Scales & Systems,
dba American Weighing Systems**
4831 Bryant Rd.
Buford, GA 30518

**Memphis Scale Works, Inc.,
a division of Kanawha Scales & Systems,
dba Ohio Scale Systems**
4600 Middle Drive,
Youngstown, OH 44505

**Memphis Scale Works, Inc.,
a division of Kanawha Scales & Systems,
dba Alabama Scale Systems**
2401 Pawnee Village Road
Birmingham, AL 35217

**Memphis Scale Works, Inc.,
a division of Kanawha Scales & Systems**
2000 Creekview
Fayetteville, AR 72704

CALIBRATION

Valid to: **August 17, 2026**

Certificate Number: **AC-1132**

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Low Range Balances ¹ (0.000 1 g, 0.001 g resolution)	Up to 100 g	1.4 mg	ASTM E617 Class 1 weights and NIST Handbook 44 utilized in the calibration of the weighing system.
(0.002 g, 0.005 g resolution)	Up to 100 g	3.6 mg	
(0.000 1 g, 0.001 g, 0.002 g resolution)	Up to 200 g	2.8 mg	
(0.005 g resolution)	Up to 200 g	4.2 mg	
(0.000 1 g, 0.001 g resolution)	Up to 300 g	3.8 mg	
(0.002 g resolution)	Up to 300 g	4 mg	
(0.005 g resolution)	Up to 300 g	5 mg	
(0.001 g, 0.002 g, 0.01 g resolution)	> 300 g	14 mg	
(0.05 resolution)	(> 300 to 1 000) g	36 mg	
(0.01 g resolution)	(> 300 to 1 000) g	69 mg	
(0.5 g resolution)	(> 300 to 1 000) g	0.34 g	
(1 g resolution)	(> 300 to 1 000) g	0.68 g	
Lab Balances ¹ (0.000 1 g, 0.000 2 g, 0.000 5 g, 0.001 g resolution)	Up to 100 g Up to 200 g	1.4 mg 2.9 mg	
(0.005 g resolution)	Up to 100 g Up to 200 g Up to 300 g	3.6 mg 4.2 mg 5.1 mg	
(0.001 g, 0.002 g resolution)	(> 100 to 300) g	4.1 mg	

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Lab Balances ¹ (0.01 g resolution) (0.05 g resolution) (0.1 g resolution)	Up to 300 g Up to 300 g Up to 300 g	7.8 mg 34 mg 68 mg	ASTM E617 Class 2 weights and NIST Handbook 44 utilized in the calibration of the weighing system.
Lab Balances ¹ (0.001 g, 0.002 g, 0.005 g, 0.01 g resolution) (0.05 g resolution) (0.1 g resolution) (0.001 g, 0.002 g, 0.005 g, 0.01 g, 0.02 g, 0.05 g resolution) (0.1 g resolution) (0.2 g resolution) (0.5 g resolution) (0.005 to 0.1 g resolution) (0.2 g resolution) (0.5 g resolution)	Up to 100 g Up to 100 g Up to 100 g (> 100 to 300) g Up to 300 g Up to 300 g Up to 300 g (> 300 to 1 200) g (> 300 to 1 200) g (> 300 to 1 200) g	25 mg 41 mg 72 mg 62 mg 85 mg 0.14 g 0.34 g 0.18 g 0.22 g 0.38 g	NIST Class F weights and NIST Handbook 44 utilized in the calibration of the weighing system.
Medium to High Range Balance ¹ (0.01 g resolution) (0.2 g resolution) (0.5 g resolution)	Up to 3 000 g Up to 5 000 g Up to 3 000 g Up to 5 000 g Up to 3 000 g Up to 5 000 g	0.32 g 0.57 g 0.34 g 0.58 g 0.46 g 0.66 g	NIST Class F weights and NIST Handbook 44 utilized in the calibration of the weighing system.
Medium to High Range Balances ¹ (1 g resolution) (2 g resolution) (5 g resolution)	Up to 10 kg Up to 20 kg Up to 50 kg	1.1 g 2.3 g 6.3 g	NIST Class F weights and NIST Handbook 44 utilized in the calibration of the weighing system.

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Bench Scales ¹ (0.01 lb resolution)	Up to 50 lb (> 50 to 100) lb	0.007 9 lb 0.009 9 lb	NIST Class F weights and NIST Handbook 44 utilized in the calibration of the weighing system.
(0.02 lb resolution)	Up to 100 lb	0.015 lb	
(0.05 lb resolution)	Up to 100 lb	0.035 lb	
Floor/Hopper/Tank/Crane/Vehicle Scales ¹ (0.05 lb resolution)	Up to 500 lb	0.069 lb	NIST Class F weights and NIST Handbook 44 utilized in the calibration of the weighing system.
(0.1 lb resolution)	Up to 500 lb Up to 1 000 lb Up to 2 000 lb Up to 5 000 lb	0.09 lb 0.11 lb 0.15 lb 0.49 lb	
(0.2 lb resolution)	Up to 2 000 lb	0.19 lb	
(0.5 lb resolution)	Up to 5 000 lb	0.58 lb	
(1 lb resolution)	Up to 2000 lb Up to 5 000 lb Up to 10 000 lb	0.69 lb 0.82 lb 1.3 lb	
(2 lb resolution)	Up to 15 000 lb Up to 20 000 lb	2.2 lb 2.7 lb	
(5 lb resolution)	Up to 20 000 lb Up to 100 000 lb	4.1 lb 5.2 lb	
Floor/Hopper/Tank/Crane/Vehicle Scales ¹ (10 lb resolution)	Up to 100 000 lb	7.8 lb	NIST Class F weights and NIST Handbook 44 utilized in the calibration of the weighing system.
(20 lb resolution)	Up to 100 000 lb	14 lb	
(50 lb resolution)	Up to 100 000 lb	34 lb	
Vehicle and Rail Scales with Test Cart ¹ (20 lb resolution)	Up to 100 000 lb Up to 200 000 lb	14 lb 15 lb	NIST Class F weights and NIST Handbook 44 utilized in the calibration of the weighing system.
(50 lb resolution)	Up to 200 000 lb	36 lb	
(100 lb resolution)	Up to 200 000 lb Up to 300 000 lb	71 lb 78 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. Numbers in parenthesis in the Parameter/Equipment column represent Balance or Scale resolution.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-1132.



Jason Stine, Vice President

