



State of Wisconsin
Governor Tony Evers

Department of Agriculture, Trade and Consumer Protection
Bradley M. Pfaff, Secretary

Wisconsin Weights and Measures Laboratory

Calibration Certificate
Statement of
Uncertainty, Traceability, Limitations, and Conditions
for calibration work performed for:

FOX VALLEY INDUSTRIAL SCALE, INC.

109 FORD DR STE D
NEW LENOX
IL
60451-3669
(815) 463-1209

Date Received: 7/31/2019
Date of Calibration: 7/31/2019
Date Due:

State Test No.: W19-252

Uncertainty Statement

For the mass standards used in this calibration, some uncertainty components were assessed through a Type A evaluation, the method for assessing uncertainty by a statistical analysis of measured quantity values obtained under defined measurement conditions. In addition, other components were assessed from a Type B evaluation of standard uncertainty, based on scientific judgement using all of the relevant information available. The combined standard uncertainty was multiplied by a statistically determined coverage factor to provide an expanded uncertainty. The expanded uncertainty defines an interval having a level of confidence of approximately 95 percent, assuming normal distribution. The expanded uncertainty presented in this report is consistent with the ISO/IEC Guide to the Expression of Uncertainty in Measurement using the Root Sum Squares method (JCGM 100:2008).

Traceability Statement

The standards used by the Wisconsin State laboratory demonstrate an unbroken traceable chain to the International System of Units (SI) through the National Institute of Standards and Technology (NIST) and are part of a comprehensive measurement assurance program for ensuring continued accuracy and measurement traceability within the level of uncertainty reported by this laboratory. The laboratory maintains documented calibration intervals and uses documented procedures, all under the performance of trained personnel who demonstrate suitable measurement assurance for the information listed in this calibration certificate. The laboratory test number identified above is the unique test number to be used in referencing measurement traceability for the artifacts identified in this certificate. The State Standards are traceable to the SI unit for mass, the kilogram.

Limitations and Conditions Statement

These results relate only to the items calibrated in this certificate. Field standards and weight carts are calibrated to NIST Handbook 105-1 (2019) and NIST Handbook 105-8 (2019), respectively, using NISTIR 6969: Selected Laboratory Measurement Practices and Procedures to Support Basic Mass Calibrations (2019). Field standards calibrated to NIST Class F, ASTM 5, and ASTM 6 tolerances are usable for testing class III, III L, and IIII weighing devices, following NIST Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices. Field standards calibrated to NIST Class F, ASTM 5, or ASTM 6 tolerances are not suitable for testing class I and class II weighing devices, which must be tested with field standards of higher precision than NIST Class F, ASTM 5, or ASTM 6. Weights calibrated to ASTM 7 tolerances by this laboratory cannot be used for testing commercial weighing devices. Field standards calibrated to ASTM Standard Specification E617-18 are not checked for density [Stainless steel weights are assumed 8.0 grams per cubic centimeter], or for magnetism.

The following standard(s) were used: 50 lb: W50LB

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Paul Masterson

Paul Masterson, Chief Metrologist



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Calibration Certificate

Date Received: July 31, 2019
Date of Calibration: July 31, 2019

State Test No.: W19-252
Item(s) Submitted: Cast Weight
Manufacturer: B of T
Condition: Good
Tolerance Class: NIST HB 105-1 (2019), Class F
Kit Serial #:
Balance ID#: 8
Procedure Used: NISTIR 6969 (2019), SOP 8
Temperature: 20.7 °C
Relative Humidity: 52.5 %
Pressure: 743.8 mmHg

Customer: FOX VALLEY INDUSTRIAL SCALE, INC.
Address: 109 FORD DR STE D
NEW LENOX, IL 60451-3669
Contact: JAMES HOLMAN
Phone: (815) 463-1209
PO Number: UG083

Nominal Mass	Mass Unit	Serial No.	Conventional Mass Correction (mg)		NIST HB 105-1 (2019), Class F		Uncertainty (mg)	Coverage Factor <i>k</i>
			As Found	As Left	As Found	As Left		
50	lb	4	4,355	85	Fail	Pass	280	2.01
50	lb	3	2,995	55	Fail	Pass	280	2.01
50	lb	10	2,725	15	Fail	Pass	280	2.01
50	lb	9	2,545	35	Fail	Pass	280	2.01
50	lb	8	2,515	15	Fail	Pass	280	2.01
50	lb	2	1,905	1,905	Pass	Pass	280	2.01
50	lb	1	3,055	105	Fail	Pass	280	2.01
50	lb	6	2,725	125	Fail	Pass	280	2.01
50	lb	7	3,845	65	Fail	Pass	280	2.01
50	lb	5	2,695	65	Fail	Pass	280	2.01

The following standard(s) were used: 50 lb: W50LB

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Paul Masterson

Paul Masterson, Chief Metrologist

Justin Lien, Laboratory Director



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The following standard(s) were used: 1000 lb: 392

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Calibration Certificate

Date Received: July 31, 2019
Date of Calibration: July 31, 2019

State Test No.: W19-252
Item(s) Submitted: Cast Weight
Manufacturer: Rice Lake
Condition: Good
Tolerance Class: NIST HB 105-1 (2019), Class F
Kit Serial #:
Balance ID#: 10
Procedure Used: NISTIR 6969 (2019), SOP 8
Temperature: 20.7 °C
Relative Humidity: 53.9 %
Pressure: 743.7 mmHg

Customer: FOX VALLEY INDUSTRIAL SCALE, INC.
Address: 109 FORD DR STE D
NEW LENOX, IL 60451-3669
Contact: JAMES HOLMAN
Phone: (815) 463-1209
PO Number: UG083

Nominal Mass	Mass Unit	Serial No.	Conventional Mass Correction (mg)		NIST HB 105-1 (2019), Class F		Uncertainty (mg)	Coverage Factor <i>k</i>
			As Found	As Left	As Found	As Left		
1000	lb	003	27,440	27,440	Pass	Pass	5600	2.01
1000	lb	004	11,540	11,540	Pass	Pass	5600	2.01

The following standard(s) were used: 1000 lb: 392

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Justin Lien, Laboratory Director