



State of Wisconsin
Governor Tony Evers

Department of Agriculture, Trade and Consumer Protection
Wisconsin Weights and Measures Laboratory

Calibration Certificate
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:	12/12/2019	State Test No.:	W19-385
Date of Calibration:	12/12/2019		
Date Issued:	12/17/2019		
Date Due:			

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.

Conformity 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.

Decision Rule

All calibrated weights and weight carts that are determined to have a mass correction such that: $|Correction| > (Tolerance - Uncertainty)$ are considered to have failed to meet the applicable tolerance. It is the decision rule of the Wisconsin State laboratory that all calibrated weights and weight carts that are determined to have a mass correction such that: $|Correction| > (0.95 * Tolerance - Uncertainty)$ will be adjusted to be closer to zero mass correction, even if the mass correction of the weights and weight carts originally met the applicable tolerance.

The following standard(s) were used: 50 lb: W50LB, 25 lb: W25LB

This report may not be reproduced, except in full, without the written approval of the Chief Metrologist or Laboratory Director.


Paul Masterson, Chief Metrologist


Justin Lien, Laboratory Director



State of Wisconsin
Governor Tony Evers

Department of Agriculture, Trade and Consumer Protection

Wisconsin Weights and Measures Laboratory

Calibration Certificate

Date Received: December 12, 2019
Date of Calibration: December 12, 2019
Date Issued: December 17, 2019

State Test No.: W19-385
Item(s) Submitted: Cast Weight
Manufacturer: Rice Lake
Condition: Good
Tolerance Class: NIST HB 105-1 (2019), Class F

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

Balance ID#: 8
Procedure Used: NISTIR 6969 (2019), SOP 8
Temperature: 22.1 °C
Relative Humidity: 40.9 %
Pressure: 739.6 mmHg

Nominal Mass	Mass Unit	Serial No.	Conventional Mass Correction (mg)		NIST HB 105-1 (2019), Class F		Uncertainty (mg)	Coverage Factor (k)
			As Found	As Left	As Found	As Left		
50	lb	52	-2,020	80	Pass	Pass	270	2.01
50	lb	50	-3,360	60	Fail	Pass	270	2.01
50	lb	53	40	40	Pass	Pass	270	2.01
50	lb	56	-4,720	-20	Fail	Pass	270	2.01
50	lb	51	-5,140	20	Fail	Pass	270	2.01
50	lb	57	-940	-940	Pass	Pass	270	2.01
50	lb	55	-3,080	0	Fail	Pass	270	2.01
50	lb	54	-1,000	-1,000	Pass	Pass	270	2.01
50	lb	59	-4,460	160	Fail	Pass	270	2.01
50	lb	58	-1,680	-1,680	Pass	Pass	270	2.01
25	lb	24619-1	-1,460	90	Fail	Pass	130	2.01

The following standard(s) were used: 50 lb: W50LB, 25 lb: W25LB

This report may not be reproduced, except in full, without the written approval of the Chief Metrologist or Laboratory Director.

Paul Masterson

Paul Masterson, Chief Metrologist

Justin Lien

Justin Lien, Laboratory Director



State of Wisconsin
Governor Tony Evers

Department of Agriculture, Trade and Consumer Protection
Wisconsin Weights and Measures Laboratory

Calibration Certificate

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:	12/12/2019	State Test No.:	W19-385
Date of Calibration:	12/12/2019		
Date Issued:	12/17/2019		
Date Due:			

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.

Conformity 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.

Decision Rule

All calibrated weights and weight carts that are determined to have a mass correction such that: $|\text{Correction}| > (\text{Tolerance} - \text{Uncertainty})$ are considered to have failed to meet the applicable tolerance. It is the decision rule of the Wisconsin State laboratory that all calibrated weights and weight carts that are determined to have a mass correction such that: $|\text{Correction}| > (0.95 * \text{Tolerance} - \text{Uncertainty})$ will be adjusted to be closer to zero mass correction, even if the mass correction of the weights and weight carts originally met the applicable tolerance.

The following standard(s) were used: Metric Weight Set WS-2

This report may not be reproduced, except in full, without the written approval of the Chief Metrologist or Laboratory Director.

Paul Masterson

Paul Masterson, Chief Metrologist

Justin Lien

Justin Lien, Laboratory Director



State of Wisconsin
Governor Tony Evers

Department of Agriculture, Trade and Consumer Protection
Wisconsin Weights and Measures Laboratory

Calibration Certificate

Date Received: December 12, 2019
Date of Calibration: December 12, 2019
Date Issued: December 17, 2019

State Test No.: W19-385
Item(s) Submitted: Weight Kit
Manufacturer: Various
Condition: Good
Tolerance Class: NIST HB 105-1 (2019), Class F
Kit Serial #: OUP
Balance ID#: 6&7
Procedure Used: NISTIR 6969 (2019), SOP 8
Temperature: 21.3 °C
Relative Humidity: 47.4 %
Pressure: 741.0 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

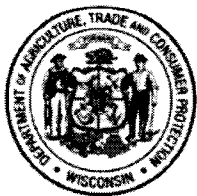
Nominal Mass	Mass Unit	Serial No.	Conventional Mass Correction (mg)		NIST HB 105-1 (2019), Class F		Uncertainty (mg)	Coverage Factor (k)
			As Found	As Left	As Found	As Left		
2000	g	OUPX	26	26	Pass	Pass	24	2.02
2000	g	OUPY	74	74	Pass	Pass	24	2.02
1000	g	OUPZ	29	29	Pass	Pass	12	2.02
200	g	M2	13	13	Pass	Pass	4.8	2.05

The following standard(s) were used: Metric Weight Set WS-2

This report may not be reproduced, except in full, without the written approval of the Chief Metrologist or Laboratory Director.

Paul Masterson
Paul Masterson, Chief Metrologist

Justin Lien
Justin Lien, Laboratory Director



State of Wisconsin
Governor Tony Evers

Department of Agriculture, Trade and Consumer Protection

Wisconsin Weights and Measures Laboratory

Calibration Certificate
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:	12/12/2019	State Test No.:	W19-385
Date of Calibration:	12/12/2019		
Date Issued:	12/17/2019		
Date Due:			

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.

Conformity 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.

Decision Rule

All calibrated weights and weight carts that are determined to have a mass correction such that: $|Correction| > (Tolerance - Uncertainty)$ are considered to have failed to meet the applicable tolerance. It is the decision rule of the Wisconsin State laboratory that all calibrated weights and weight carts that are determined to have a mass correction such that: $|Correction| > (0.95 * Tolerance - Uncertainty)$ will be adjusted to be closer to zero mass correction, even if the mass correction of the weights and weight carts originally met the applicable tolerance.

The following standard(s) were used: Avoirdupois Weight Set WS-1

This report may not be reproduced, except in full, without the written approval of the Chief Metrologist or Laboratory Director.

Paul Masterson

Paul Masterson, Chief Metrologist

Justin Lien

Justin Lien, Laboratory Director



State of Wisconsin
Governor Tony Evers

Department of Agriculture, Trade and Consumer Protection
Wisconsin Weights and Measures Laboratory

Calibration Certificate

Date Received: December 12, 2019
Date of Calibration: December 12, 2019
Date Issued: December 17, 2019

State Test No.: W19-385
Item(s) Submitted: Weight Kit
Manufacturer: Rice Lake/Troemner
Condition: Good
Tolerance Class: NIST HB 105-1 (2019), Class F
Kit Serial #: S908
Balance ID#: 6&7
Procedure Used: NISTIR 6969 (2019), SOP 8
Temperature: 21.3 °C
Relative Humidity: 48.5 %
Pressure: 741.2 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

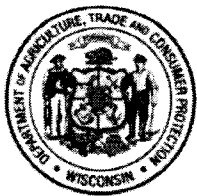
Nominal Mass	Mass Unit	Serial No.	Conventional Mass Correction (mg)		NIST HB 105-1 (2019), Class F		Uncertainty (mg)	Coverage Factor (k)
			As Found	As Left	As Found	As Left		
5	lb		13	13	Pass	Pass	27	2.02
5	lb	*	23	23	Pass	Pass	27	2.02
5	lb	**	31	31	Pass	Pass	27	2.02
5	lb	***	9	9	Pass	Pass	27	2.02
5	lb	****	44	44	Pass	Pass	27	2.02
1	lb		3.3	3.3	Pass	Pass	8.3	2.01
1	lb	*	1.3	1.3	Pass	Pass	8.3	2.01
1	lb	**	0.3	0.3	Pass	Pass	8.3	2.01
1	lb	***	5.3	5.3	Pass	Pass	8.3	2.01
1	lb	****	-1.7	-1.7	Pass	Pass	8.3	2.01
0.5	lb		-1.8	-1.8	Pass	Pass	5.5	2.02
0.2	lb		15.6	13.7	Pass	Pass	2.2	2.04
0.2	lb	*	9.2	9.2	Pass	Pass	2.2	2.04
0.1	lb		8	7.2	Fail	Pass	1.1	2.04
0.05	lb		4.34	3.34	Fail	Pass	0.54	2.04
0.02	lb		1.35	1.35	Pass	Pass	0.32	2.04
0.02	lb	*	1.2	1.2	Pass	Pass	0.32	2.04
0.01	lb		0.22	0.22	Pass	Pass	0.31	2.04
0.005	lb		0.69	0.69	Pass	Pass	0.15	2.04
0.002	lb		0.53	0.53	Pass	Pass	0.11	2.04
0.002	lb	*	0.49	0.49	Pass	Pass	0.11	2.04
0.001	lb	1	0.177	0.177	Pass	Pass	0.089	2.04
0.001	lb	2	-0.113	-0.113	Pass	Pass	0.089	2.04
0.001	lb	3	0.147	0.147	Pass	Pass	0.089	2.04
0.001	lb	4	0.357	0.357	Pass	Pass	0.089	2.04
0.001	lb	5	-0.013	-0.013	Pass	Pass	0.089	2.04
0.001	lb	6	0.167	0.167	Pass	Pass	0.089	2.04
0.001	lb	7	0.427	0.427	Pass	Pass	0.089	2.04

The following standard(s) were used: Avoirdupois Weight Set WS-1

This report may not be reproduced, except in full, without the written approval of the Chief Metrologist or Laboratory Director.

Paul Masterson
Paul Masterson, Chief Metrologist

Justin Lien
Justin Lien, Laboratory Director



State of Wisconsin
Governor Tony Evers

Department of Agriculture, Trade and Consumer Protection

Wisconsin Weights and Measures Laboratory

Calibration Certificate

Date Received: December 12, 2019
Date of Calibration: December 12, 2019
Date Issued: December 17, 2019

State Test No.: W19-385
Item(s) Submitted: Weight Kit
Manufacturer: Rice Lake/Troemner
Condition: Good
Tolerance Class: NIST HB 105-1 (2019), Class F
Kit Serial #: S908
Balance ID#: 6&7
Procedure Used: NISTIR 6969 (2019), SOP 8
Temperature: 21.3 °C
Relative Humidity: 48.5 %
Pressure: 741.2 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

Nominal Mass	Mass Unit	Serial No.	Conventional Mass Correction (mg)		NIST HB 105-1 (2019), Class F		Uncertainty (mg)	Coverage Factor (k)
			As Found	As Left	As Found	As Left		
0.001	lb	8	0.417	0.417	Pass	Pass	0.089	2.04
0.001	lb	9	0.257	0.257	Pass	Pass	0.089	2.04
0.001	lb	10	0.187	0.187	Pass	Pass	0.089	2.04
0.001	lb	11	0.287	0.287	Pass	Pass	0.089	2.04

The following standard(s) were used: Avoirdupois Weight Set WS-1

This report may not be reproduced, except in full, without the written approval of the Chief Metrologist or Laboratory Director.

Paul Masterson

Paul Masterson, Chief Metrologist

Justin Lien

Justin Lien, Laboratory Director