



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
DIVISION OF QUALITY ASSURANCE AND REGULATIONS
28 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0028

Amanda E. Beal
COMMISSIONER

Celeste Poulin
Director

REPORT OF CALIBRATION
MAINE TEST NUMBER 7688ME
Weight Kit: 5 lb to 0.001 lb
SN: 54
Date of Report: December 28, 2020

SUBMITTED BY:
Maine Scale Company
4 Washington Street North
Auburn, ME 04210

The mass standards described above have been compared with standards of the State of Maine, by modified substitution (NIST SOP 8), and were found to be, or adjusted to within NIST Handbook 105-1 Class "F" tolerances. Standards received in good condition.

Standards of the state of Maine are traceable to the National Institute of Standards and Technology through Oregon State test number OR-18-240-C. The Maine Laboratory is recognized by NIST, OWM, under the "Laboratory Metrology Program", at Mass Echelon III for 2020. Measurements by this laboratory are traceable to the National Standards at NIST.

The mass standards described above were found to have mass values at the time of test as indicated in the following tabulation. Weights received in an out of tolerance condition show a value in the "before adjustment" column. Calibrations performed by this laboratory comply with the requirements of ISO/IEC 17025:2017. **SI conversion: 1-pound avoirdupois equals 0.45359237 kilograms.**

Nominal & marking	Correction mg	NIST Class F Tolerance mg	Uncertainty mg	Before Adjustment
5 lb	-13	230	28	---
5 lb *	1.5	230	28	---
5 lb **	-0.5	230	28	---



Maine Scale Company
MAINE TEST NUMBER 7688ME
 Page 2 of 3

Nominal & marking	Correction mg	NIST Class F Tolerance mg	Uncertainty mg	Before Adjustment
5 lb ***	5	230	28	---
5 lb ****	1	230	28	---
1 lb	32.9	70	8.7	---
1 lb *	23.9	70	8.7	---
1 lb **	34.9	70	8.7	---
1 lb ***	21.9	70	8.7	---
1 lb ****	29.9	70	8.7	---
0.5 lb	13.0	45	5.9	---
0.2 lb	5.1	18	3.3	---
0.2 lb *	3.9	18	3.3	---
0.1 lb	2.2	9.1	1.1	---
0.05 lb	0.00	4.5	0.55	---
0.02 lb	0.61	1.8	0.23	---
0.02 lb *	0.22	1.8	0.23	---
0.01 lb	0.66	1.5	0.18	---
0.005 lb	0.94	1.2	0.15	---
0.002 lb	0.54	0.87	0.11	---
0.002 lb *	0.48	0.87	0.11	---
0.001 lb	0.499	0.70	0.090	---

Environmental conditions at time of test:
 Temperature: 20.8 °C
 Relative Humidity: 40.3 %
 Barometric Pressure: 752.89 mmHg
 Data reduction sheets are on file at the laboratory.

The uncertainties shown with reported values are calculated on the conventional mass values and expressed as the sum of the following sources of inaccuracy; (1) Type B, systematic errors relative to the reference standard and procedure used, including bias, and (2) Type A, random errors determined by the standard deviation of the measurement process. Type A and Type B uncertainties are combined by the root sum squared method and multiplied by a coverage factor to represent approximately a 95% confidence level. All mass values have been determined as "conventional mass" with respect to stainless steel with a density of 8.0 g/cm³ at 20 °C. The combined measurement uncertainty and measurement result have been taken in to account when issuing statements of compliance.



Maine Scale Company
MAINE TEST NUMBER 7688ME
Page 3 of 3

Date Received: December 14, 2020
Date of Test: December 17, 2020
Calibration Due: December 31, 2022
Calibration by: Bradford Bachelder



Bradford Bachelder, Metrologist

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Calibrations performed at 333 Cony Road, Augusta ME.





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AUGUSTA, MAINE 04333-0028

Amanda E. Beal
COMMISSIONER

Celeste Poulin
DIRECTOR

REPORT OF CALIBRATION
MAINE TEST NUMBER 7684ME
(39) 50 lb. Cast Iron Weights
Date of Report: December 28, 2020

SUBMITTED BY:
Maine Scale Company
4 Washington Street North
Auburn, ME 04210

The mass standards described above have been compared with standards of the State of Maine, by modified substitution, and were found to be, or adjusted to within NIST Handbook 105-1 Class "F" tolerances.

Standards of the state of Maine are traceable to the National Institute of Standards and Technology through Oregon State test number OR-18-240-C. The Maine Laboratory is recognized by NIST, OWM, under the "Laboratory Metrology Program", at Mass Echelon III for 2020. Measurements by this laboratory are traceable to the National Standards at NIST. The mass standards described above were found to have mass values at the time of test as indicated in the following tabulation. Weights received in an out of tolerance condition show a value in the "before adjustment" column. Weights received in fair condition.

The uncertainties shown with reported values are calculated on the conventional mass values and expressed as the sum of the following sources of inaccuracy; (1) Type B, systematic errors relative to the reference standard and procedure used, including bias, and (2) Type A, random errors determined by the standard deviation of the measurement process. Type A and Type B uncertainties are combined by the root sum squared method and multiplied by a coverage factor of 2.01 ($k=2.01$) representing a 95% confidence level. All mass values have been determined as "conventional mass" with respect to stainless steel with a density of 8.0 g/cm^3 at $20 \text{ }^\circ\text{C}$. The combined measurement uncertainty and measurement result have been taken in to account when issuing statements of compliance.

Data reduction sheets are on file at the laboratory.

Page 1 of 3



PHONE: (207) 287-7587

NVLAP Lab Code 200414-0

FAX: (207) 287-7161

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Maine Scale Company
Maine Test Number 7684ME
 Page 2 of 3

Serial Number	Nominal	Correction (grams)	NIST Class F Tolerance (grams)	Uncertainty (grams)	Before adjustment (grams)
	50 lb.	0.69	2.3	0.13	---
	50 lb.	-1.06	2.3	0.13	---
	50 lb.	1.69	2.3	0.13	---
	50 lb.	-0.08	2.3	0.13	---
	50 lb.	0.18	2.3	0.13	---
	50 lb.	0.15	2.3	0.28	---
	50 lb.	-2.01	2.3	0.28	---
	50 lb.	-1.96	2.3	0.28	---
	50 lb.	0.86	2.3	0.28	---
	50 lb.	-1.19	2.3	0.28	---
	50 lb.	1.56	2.3	0.28	---
	50 lb.	1.02	2.3	0.28	---
	50 lb.	-0.22	2.3	0.28	---
	50 lb.	-0.68	2.3	0.28	---
	50 lb.	-0.06	2.3	0.28	---
	50 lb.	0.23	2.3	0.28	---
	50 lb.	1.15	2.3	0.28	---
	50 lb.	1.22	2.3	0.28	---
	50 lb.	1.46	2.3	0.28	---
	50 lb.	0.57	2.3	0.28	---
	50 lb.	-0.76	2.3	0.28	---
	50 lb.	-1.38	2.3	0.28	---
	50 lb.	-1.09	2.3	0.28	---
	50 lb.	-1.85	2.3	0.28	---
	50 lb.	-0.79	2.3	0.28	---
	50 lb.	0.55	2.3	0.28	---
	50 lb.	0.35	2.3	0.28	-4.70
	50 lb.	0.50	2.3	0.28	-3.87
	50 lb.	0.32	2.3	0.28	-4.00
	50 lb.	-1.99	2.3	0.28	---
	50 lb.	-1.78	2.3	0.28	---
	50 lb.	-1.97	2.3	0.28	---
	50 lb.	0.70	2.3	0.28	-3.84
	50 lb.	0.60	2.3	0.28	-2.96
	50 lb.	-0.36	2.3	0.28	---



Maine Scale Company
Maine Test Number 7684ME
Page 3 of 3

Serial Number	Nominal	Correction (grams)	NIST Class F Tolerance (grams)	Uncertainty (grams)	Before adjustment (grams)
60	50 lb.	-1.99	2.3	0.28	---
70	50 lb.	0.31	2.3	0.28	---
71	50 lb.	0.56	2.3	0.28	-5.06
310	50 lb.	-0.83	2.3	0.28	---

Calibrations performed by this laboratory comply with the requirements of ISO/IEC 17025:2017.
SI conversion: 1-pound avoirdupois equals 0.45359237 kilograms.

Environmental conditions at time of test:
Temperature: 20.1 °C
Relative Humidity: 40.9 %
Pressure: 758.26 mmHg

Date Received: December 15, 2020
Date of Test: December 15, 2020
Calibration Due: December 31, 2021
Calibration by: Bradford Bachelder



Bradford Bachelder, Metrologist

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Calibrations performed at 333 Cony Road, Augusta ME.





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28 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0028

Amanda E. Beal
COMMISSIONER

Celeste Poulin
Director

REPORT OF CALIBRATION
MAINE TEST NUMBER 7685ME
(5) 500 lb & (30) 1000 lb Cast Iron Weights
Date of Report: December 28, 2020

SUBMITTED BY:
Maine Scale Company
4 Washington Street North
Auburn, ME 04210

The mass standards described above have been compared with standards of the State of Maine, by modified substitution, and were found to be, or adjusted to within NIST Handbook 105-1 Class "F" tolerances.

Standards of the state of Maine are traceable to the National Institute of Standards and Technology through Oklahoma Bureau of Standards test no. OBS 17-1193. The Maine Laboratory is recognized by NIST, OWM, under the "Laboratory Metrology Program", at Mass Echelon III for 2020. Measurements by this laboratory are traceable to the National Standards at NIST.

The mass standards described above were found to have mass values at the time of test as indicated in the following tabulation. Weights received in an out of tolerance condition show a bold value in the "before adjustment" column. Weights received in good condition. The combined measurement uncertainty and measurement result have been taken in to account when issuing statements of compliance.

The uncertainties shown with reported values are calculated on the conventional mass values and expressed as the sum of the following sources of inaccuracy; (1) Type B, systematic errors relative to the reference standard and procedure used, including bias, and (2) Type A, random errors determined by the standard deviation of the measurement process. Type A and Type B uncertainties are combined by the root sum squared method and multiplied by a coverage factor of 2 ($k=2$) representing approximately a 95 % confidence level. All mass values have been determined as "conventional mass" with respect to stainless steel with a density of 8.0 g/cm^3 at 20°C .

Page 1 of 3



PHONE: (207) 287-7587

NVLAP Lab Code 200414-0

FAX: (207) 287-7161

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Maine Scale Company
Maine Test Number 7685ME
Page 2 of 3

Serial Number	Nominal	Correction g	NIST Class F Tolerance, g	Uncertainty g	Before Adjustment, g
74	500 lb.	-18.7	23	3.1	---
75	500 lb.	-0.7	23	3.1	---
76	500 lb.	-7.0	23	3.1	---
77	500 lb.	-10.6	23	3.1	---
79	500 lb.	-12.7	23	3.1	---
1	1000 lb.	-30.7	45	5.7	---
2	1000 lb.	17.8	45	5.7	---
3	1000 lb.	21.7	45	5.7	---
4	1000 lb.	-18.3	45	5.7	---
5	1000 lb.	34.5	45	5.7	---
6	1000 lb.	0.7	45	5.7	---
7	1000 lb.	31.6	45	5.7	---
8	1000 lb.	21.6	45	5.7	---
9	1000 lb.	-36.2	45	5.7	---
10	1000 lb.	27.9	45	5.7	---
11	1000 lb.	12.7	45	5.7	55.6
12	1000 lb.	7.0	45	5.7	---
13	1000 lb.	0.1	45	5.7	---
14	1000 lb.	32.1	45	5.7	---
15	1000 lb.	-19.1	45	5.7	---
16	1000 lb.	-0.9	45	5.7	---
60	1000 lb.	19.8	45	5.7	---
61	1000 lb.	-12.4	45	5.7	---
62	1000 lb.	-20.7	45	5.7	---
63	1000 lb.	-27.2	45	5.7	---
64	1000 lb.	-33.5	45	5.7	---
65	1000 lb.	-28.9	45	5.7	---
66	1000 lb.	-10.6	45	5.7	---
67	1000 lb.	0.4	45	5.7	---
68	1000 lb.	7.1	45	5.7	-48.2
69	1000 lb.	27.8	45	5.7	---
70	1000 lb.	10.1	45	5.7	-50.9
71	1000 lb.	-38.2	45	5.7	---
72	1000 lb.	25.9	45	5.7	---
73	1000 lb.	-24.6	45	5.7	---



Maine Scale Company
Maine Test Number 7685ME
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Environmental conditions at time of test:

Temperature: 20.6 °C

Relative Humidity: 40.0 %

Pressure: 768.02 mmHg

Data reduction sheets are on file at the laboratory.

Calibrations performed by this laboratory comply with the requirements of ISO/IEC 17025:2017.

SI conversion: 1-pound avoirdupois equals 0.45359237 kilograms.

Date Received: December 14, 2020

Date of Test: December 16, 2020

Calibration Due: December 31, 2021

Calibration by: Bradford Bachelder



Bradford Bachelder, Metrologist

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AUGUSTA, MAINE 04333-0028

JANET T. MILLS
GOVERNOR

Amanda E. Beal
COMMISSIONER

Celeste Poulin
DIRECTOR

REPORT OF CALIBRATION
MAINE TEST NUMBER 7686ME
Metric Weight Kit: 5 kg to 1 g
SN: 28620
Date of Report: December 28, 2020

SUBMITTED BY:
Maine Scale Company
4 Washington Street North
Auburn, ME 04210

The mass standards described above have been compared with standards of the State of Maine, by modified substitution (NIST SOP 8), and were found to be, or adjusted to within NIST Handbook 105-1 Class "F" tolerances. Weights received in good condition.

Standards of the State of Maine are traceable to the National Institute of Standards and Technology through Oregon State test number OR-18-240-C. The Maine Laboratory is recognized by NIST, OWM, under the "Laboratory Metrology Program", at Mass Echelon III for 2020. Measurements by this laboratory are traceable to the National Standards at NIST.

The mass standards described above were found to have mass values at the time of test as indicated in the tabulation on the following page. Weights received in an out of tolerance condition will show a value in a "before adjustment" column if required.

The uncertainties shown with reported values are calculated on the conventional mass values and expressed as the sum of the following sources of inaccuracy; (1) Type B, systematic errors relative to the reference standard and procedure used, including bias, and (2) Type A, random errors determined by the standard deviation of the measurement process. Type A and Type B uncertainties are combined by the root sum squared method and multiplied by a coverage factor of 2.02 ($k=2.02$) representing approximately a 95% confidence level. All mass values have been determined as "conventional mass" with respect to stainless steel with a density of 8.0 g/cm^3 at $20 \text{ }^\circ\text{C}$.

The combined measurement uncertainty and measurement result have been taken in to account when issuing statements of compliance.

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Maine Scale Company
MAINE TEST NUMBER 7686ME
 Page 2 of 3

Calibrations performed by this laboratory comply with the requirements of ISO/IEC 17025:2017.

Environmental conditions at time of test:

Temperature: 20.2 °C

Relative Humidity: 40.3 %

Barometric Pressure: 753.05 mmHg.

Data reduction sheets are on file at the laboratory.

Nominal & Marking	Correction mg	NIST Class F Tolerance mg	Uncertainty mg	Before Adjustment
5 kg	164	500	59	---
5 kg *	158	500	59	---
2 kg	60	200	24	---
2 kg *	67	200	24	---
1 kg	32	100	12	---
500 g *	18.0	70	8.5	---
500 g **	32.0	70	8.5	---
500 g ***	21.0	70	8.5	---
500 g ****	29.0	70	8.5	---
500 g *****	25.0	70	8.5	---
200 g	14.5	40	5.2	---
200 g *	10.5	40	5.2	---
100 g	3.9	20	2.4	---
50 g	3.9	10	1.2	---
20 g	0.99	4	0.49	---
20 g *	0.76	4	0.49	---
10 g	0.43	2	0.24	---
5 g	0.35	1.5	0.18	---
2 g	0.06	1.1	0.13	---
2 g *	0.37	1.1	0.13	---
1 g	0.43	0.90	0.11	---

Date Received: December 14, 2020

Date of Test: December 17, 2020

Calibration Due: December 31, 2022

Calibration by: Bradford Bachelder



Bradford Bachelder, Metrologist



Maine Scale Company
MAINE TEST NUMBER 7686ME
Page 3 of 3

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28 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0028

JANET T. MILLS
GOVERNOR

Amanda E. Beal
COMMISSIONER

Celeste Poulin
Director

REPORT OF CALIBRATION
MAINE TEST NUMBER 7687ME
 Weight Kit: 10 lb to 0.01 lb
 SN: 28619
 Date of Report: December 28, 2020

SUBMITTED BY:
 Maine Scale Company
 4 Washington Street North
 Auburn, ME 04210

The mass standards described above have been compared with standards of the State of Maine, by modified substitution (NIST SOP 8), and were found to be, or adjusted to within NIST Handbook 105-1 Class "F" tolerances. Standards received in good condition.

Standards of the state of Maine are traceable to the National Institute of Standards and Technology through Oregon State test number OR-18-240-C. The Maine Laboratory is recognized by NIST, OWM, under the "Laboratory Metrology Program", at Mass Echelon III for 2020. Measurements by this laboratory are traceable to the National Standards at NIST.

The mass standards described above were found to have mass values at the time of test as indicated in the following tabulation. Weights received in an out of tolerance condition show a value in the "before adjustment" column. Calibrations performed by this laboratory comply with the requirements of ISO/IEC 17025:2017. **SI conversion: 1-pound avoirdupois equals 0.45359237 kilograms.**

Nominal & marking	Correction mg	NIST Class F Tolerance mg	Uncertainty mg	Before Adjustment
10 lb	65	450	55	---
10 lb *	12	450	55	---
5 lb	38	230	28	---
2 lb	31	91	12	---



Maine Scale Company
MAINE TEST NUMBER 7687ME

Page 2 of 3

Nominal & marking	Correction mg	NIST Class F Tolerance mg	Uncertainty mg	Before Adjustment
2 lb *	30	91	12	---
1 lb	31.9	70	8.7	---
0.5 lb	20.0	45	5.9	---
0.2 lb	7.7	18	3.3	---
0.2 lb *	5.0	18	3.3	---
0.1 lb	3.6	9.1	1.1	---
0.05 lb	1.93	4.5	0.55	---
0.02 lb	0.26	1.8	0.23	---
0.02 lb *	0.57	1.8	0.23	---
0.01 lb	0.25	1.5	0.18	---

Environmental conditions at time of test:

Temperature: 20.5 °C

Relative Humidity: 40.6 %

Barometric Pressure: 753.07 mmHg

Data reduction sheets are on file at the laboratory.

The uncertainties shown with reported values are calculated on the conventional mass values and expressed as the sum of the following sources of inaccuracy; (1) Type B, systematic errors relative to the reference standard and procedure used, including bias, and (2) Type A, random errors determined by the standard deviation of the measurement process. Type A and Type B uncertainties are combined by the root sum squared method and multiplied by a coverage factor to represent approximately a 95% confidence level. All mass values have been determined as "conventional mass" with respect to stainless steel with a density of 8.0 g/cm³ at 20 °C. The combined measurement uncertainty and measurement result have been taken in to account when issuing statements of compliance.



Maine Scale Company
MAINE TEST NUMBER 7687ME
Page 3 of 3

Date Received: December 14, 2020
Date of Test: December 17, 2020
Calibration Due: December 31, 2022
Calibration by: Bradford Bachelder



Bradford Bachelder, Metrologist

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