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

JANET T. MILLS
GOVERNOR

Amanda E. Beal
Commissioner

Celeste Poulin
Director

AMENDED REPORT OF CALIBRATION
MAINE TEST NUMBER 8212ME
20 kg stainless grip weight SN: 5IEM
10 kg stainless grip weight SN: 5IEF
ASTM E617-18 Class 4 tolerances
Date of Report: October 25, 2024

SUBMITTED BY
Advanced Scale, Inc.
13 Delta Dr, Unit 6
Londonderry, NH 03053

The mass standards described above have been compared with standards of the State of Maine by NIST SOP 4: Weighing by Double Substitution (May 2019) and found to have mass values, at time of test, as indicated in the following tabulation. The mass standards are assumed to be stainless steel with a density of 7.84 g/cm^3 at 20 °C for air buoyancy correction. Measurements conducted by this laboratory are traceable to the International System of Units (S.I.). Weights were received in good 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, including bias, and procedure used, 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 k (k=2.16) representing approximately a 95% confidence level. Magnetism screening was not conducted and is not represented in the uncertainty budget. All mass values have been determined as "conventional mass" with respect to stainless steel with a density of 8.0g/cm^3 at 20 °C. The summation value of the measurement uncertainty and measurement result is used when comparing results to specified tolerances and issuing statements of compliance. Weights found in an out of tolerance condition will have conventional mass correction values in bold.

Nominal	True Mass g	True Mass correction, mg	Conventional Mass, g	Conventional Mass correction, mg	Uncertainty mg	ASTM E617-18 Class 4 Tolerance, mg
20000 g	20000.0827	82.7	20000.0215	21.5	9.8	400
10000 g	10000.0561	56.1	10000.0255	25.5	5.3	200

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CALIBRATION
NVLAP LAB CODE 200414-0

PHONE: (207) 287-7587 FAX: (207) 287-7161

Data reduction sheets are on file at the laboratory. Values reported are "as found", no adjustments have been made. Calibrations performed by this laboratory comply with the requirements of ISO/IEC 17025:2017.

Magnetism, Density, & Surface Finish: The calibration performed did not include testing to determine whether the test items met the maximum susceptibility requirements for magnetism, limits for density, or maximum values for surface finish. Where applicable, our laboratory uses an assumed density which is provided by the client or weight manufacturer. It is the responsibility of the requestor of the calibration to select classifications acceptable to their needs.

Standards of the State of Maine are traceable to the National Institute of Standards and Technology through State of Oregon Department of Agriculture State Test No: OR-24-022-C. The Maine Metrology Laboratory is recognized at mass accuracy Echelon II by NIST, OWM under the "Laboratory Metrology Program" for 2024.

Laboratory environmental range:
Temperature: 19.16 °C to 19.36 °C
Relative humidity: 45.02 % to 45.85 %
Barometric pressure: 754.79 mmHg to 754.92 mmHg

Date Received: October 18, 2024
Date of test: October 24, 2024
Calibration due: October 31, 2025

Bradford Bachelder, Metrologist

Calibrations performed at 333 Cony Road, Augusta ME.

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