



Certificate of Calibration

Mass Artifact Submitted By:

The Scale People Inc-MD
9693-C Gerwig Lane
Columbia, MD 21046

Mass Artifact Information:

Date of Calibration:	29-Jun-2023
Next Calibration:	30-Jun-2024
Purchase Order:	n/a

Description of Mass Artifact

Manufacturer:	Unknown
Asset ID:	n/a
Accuracy Class:	OIML E2
Description:	1mg - 500g Weight Kit

Environmental Condition Range:

Temperature:	21 °C to 21.9 °C
Barometric Pressure:	1004 mbar to 1005 mbar
Relative Humidity:	42 % to 44 %
Air Density	See Page 2

Visual Inspection of Mass Artifact when Received:

Good

Notes Regarding Calibration:

Cleaned and Calibrated

Procedure Used in Calibration:

SOP 32 - Double Substitution

This calibration certificate shall not be reproduced except in full and without written permission of The Lab People, Inc.



Certificate of Calibration

Certificate #: 67946-TB
Customer: The Scale People Inc-MD
Calbration Date: 29-Jun-2023

"As Found Data" is the same as "As Left Data" unless listed in "As Found" table

Nominal	ID	True Mass (g)	True Mass Corr. (mg)	Conventional Mass [‡] (g)	Conventional Mass Corr. ^Δ (mg)	(k=2) Unc (mg)	MPE [♦] (mg)	MPE P/F	Assumed Density g/cm ³	Balance Used	Reference Standard	Air Density g/cm ³
1 mg	1M5GK2	0.0010035	0.0035	0.0010032	0.0032	0.0013	0.006	P	2.7	XPR6U	9VKV	0.001185
2 mg	1M5GK2	0.0020006	0.0006	0.0020000	0.0000	0.0014	0.006	P	2.7	XPR6U	9VKV	0.001185
2 mg*	1M5GK2	0.0020011	0.0011	0.0020005	0.0005	0.0014	0.006	P	2.7	XPR6U	9VKV	0.001185
5 mg	1M5GK2	0.0050045	0.0045	0.0050031	0.0031	0.0014	0.006	P	2.7	XPR6U	9VKV	0.001185
10 mg	1M5GK2	0.0100034	0.0034	0.0100034	0.0034	0.0012	0.008	P	7.95	XPR6U	9VKV	0.001185
20 mg	1M5GK2	0.0200047	0.0047	0.0200047	0.0047	0.0013	0.01	P	7.95	XPR6U	9VKV	0.001184
20 mg*	1M5GK2	0.0200035	0.0035	0.0200035	0.0035	0.0013	0.01	P	7.95	XPR6U	9VKV	0.001185
50 mg	1M5GK2	0.0500032	0.0032	0.0500032	0.0032	0.0013	0.012	P	7.95	XPR6U	9VKV	0.001184
100 mg	1M5GK2	0.1000013	0.0013	0.1000012	0.0012	0.0014	0.016	P	7.95	XPR6U	9VKV	0.001184
200 mg	1M5GK2	0.2000005	0.0005	0.2000004	0.0004	0.0013	0.02	P	7.95	XPR6U	9VKV	0.001185
200 mg*	1M5GK2	0.2000039	0.0039	0.2000038	0.0038	0.0013	0.02	P	7.95	XPR6U	9VKV	0.001186
500 mg	1M5GK2	0.5000038	0.0038	0.5000034	0.0034	0.0017	0.025	P	7.95	XPR6U	9VKV	0.001185
1 g	1M5GK2	1.0000102	0.0102	1.0000108	0.0108	0.0027	0.03	P	8.03	XPR6U	9VKV	0.001184
2 g	1M5GK2	2.0000141	0.0141	2.0000153	0.0153	0.0027	0.04	P	8.03	XPR6U	9VKV	0.001185
2 g*	1M5GK2	2.0000144	0.0144	2.0000155	0.0155	0.0027	0.04	P	8.03	XPR6U	9VKV	0.001184
5 g	1M5GK2	5.000002	0.002	5.000005	0.005	0.0039	0.05	P	8.03	XPR56C	9VKV	0.001183
10 g	1M5GK2	10.000010	0.010	10.000015	0.015	0.010	0.06	P	8.03	XPR56C	9VKV	0.001183
20 g	1M5GK2	19.999989	-0.011	20.000001	0.001	0.0085	0.08	P	8.03	XPR56C	9VKV	0.001183
20 g*	1M5GK2	19.999993	-0.007	20.000005	0.005	0.0085	0.08	P	8.03	XPR56C	9VKV	0.001183
50 g	1M5GK2	50.000015	0.015	50.000043	0.043	0.017	0.1	P	8.03	XPR56C	9VKV	0.001181
100 g	1M5GK2	100.000020	0.020	100.000076	0.076	0.032	0.16	P	8.03	MCM106	9VKV	0.001183
200 g	1M5GK2	199.999852	-0.148	199.999964	-0.036	0.058	0.3	P	8.03	AX206	9VKV	0.001183
200 g*	1M5GK2	199.999788	-0.212	199.999900	-0.100	0.058	0.3	P	8.03	AX206	9VKV	0.001183
500 g	1M5GK2	500.0000	0.0	500.0003	0.3	0.22	0.8	P	8.03	MCM5004	9VKV	0.001183



**EXAMPLE CERT -
Uncontrolled Copy**



Certificate of Calibration

Equipment Used in Assistance to Calibration	
Equipment Used	Description
Mass Standard	See Page 2
Mass Comparator	See Page 2
Barometer	05879
Temp/Humidity	221848935

Calibration Completed By: Trevor Bundy

Trevor Bundy, Mass Technician

Date: 29-Jun-2023

True Mass: The mass value of a weight as if it were tested in a vacuum

Conventional Mass: The conventional value of the result of weighing in air, in accordance to International Recommendation OIML D 28 (Edition 2004 (E)). For a weight taken at 20 °C, the conventional mass is the mass of a reference weight of a density of 8000 kg/m³ which it balances in air of a density of 1.2 kg/m

Conventional Mass Correction: The conventional mass correction is the difference between the nominal value of the assigned weight and the conventional mass. A positive correction indicates the mass is heavier than the nominal value.

MPE: The MPE is assessed based on the tolerance specified on this certificate, in addition to the expanded uncertainty (Please refer to uncertainty statement for how that is obtained). F - The weight is out of tolerance (conventional mass correction plus uncertainty exceeds tolerance). P - the weight is within tolerance (conventional mass correction plus uncertainty is Less than tolerance)

Uncertainty Statement: The uncertainty of the calibration has been calculated using the root-sum-squares method including both Type A components, assuming a normal distribution, and Type B components. Magnetism, true density, and surface finish was not considered in the uncertainty. The combined standard uncertainty is multiplied the coverage factor k= 2 to give an expanded uncertainty, which defines an interval having a level of confidence of 95 percent. The expanded uncertainty presented in this report is consistent with ISO 98-3 (Edition 2008) Guide to the Expression of Uncertainty in Measurement. The expanded uncertainty is not to be confused with a tolerance limit for the user during its application.

Traceability Statement: The standards of this laboratory are traceable to the International System of Units (SI) through the National Institute of Standards and technology. The standards used are part of a comprehensive measurement assurance program for ensuring continued accuracy and measurements traceable within the level of uncertainty report by this laboratory. This laboratory complies with ISO/IEC 17025:2017. Certificate Number: 1452.01

Conformity Statement: The results in this calibration were made using the procedure described on page 1 of the calibration cert. Magnetism, true density and surface finish of the weight(s) were not taken into consideration for the weights listed on this calibration certificate.

Density: The density information is assumed unless otherwise stated. Information supplied by the customer can affect the validity of results.

This calibration certificate shall not be reproduced except in full and without written permission of The Lab People, Inc.