

Calibration Weights



- NVLAP-accredited metrology laboratory
- Corrosion-resistant stainless steel
- Single-piece construction
- Meet or exceed all ASTM and OIML standards
- 1 gram to 5 kilogram weights
- Custom weight sets available

Balance Calibration Weights

Electronic balances must be calibrated with a mass standard upon installation and on a regular basis thereafter. Calibration values vary over time because of changing conditions within the balance or its environment, such as:

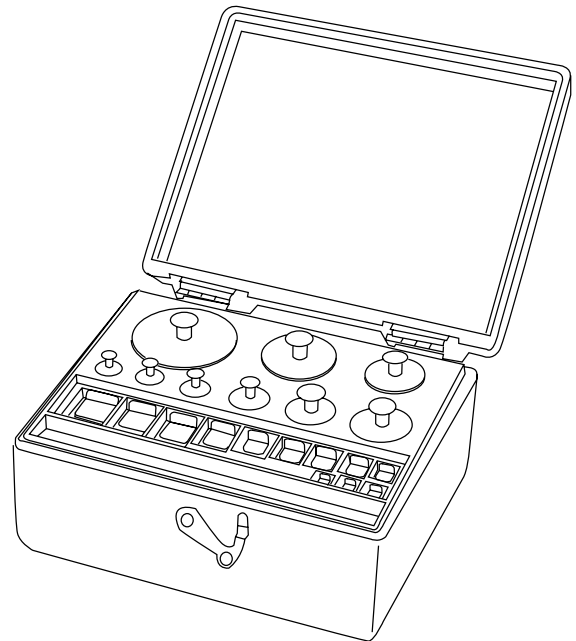
- Differing gravitational forces
- Temperature variations
- Aging electronic components
- Movement or relocation of the balance

Trust the experts.

Denver Instrument Company has a century-long tradition of quality and innovation in the manufacture of precision mass measurement equipment. The mass standards produced by Denver Instrument are designed to meet or exceed the standards of the American Society of Testing and Materials (ASTM E 617) and the Organization Internationale de Métrologie Légale (OIML R111).

Single-piece construction.

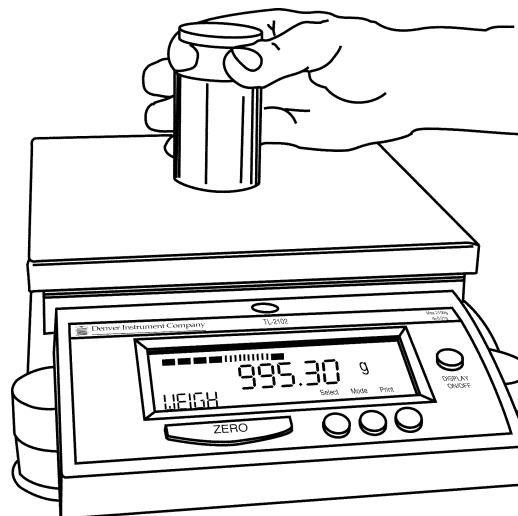
All Denver Instrument weights are ASTM Type 1 single-piece weights. They contain no air cavity or foreign adjusting material, thus providing the maximum mass stability. A precise measurement of density can only be made using a single-piece weight and ASTM requires one-piece weights for use as standards and where mass stability is required. common to plant operation.



Weight Sets

Count on Denver Instrument Company for the finest quality analytical weight sets, appropriate for every weighing application. Each set is packaged in a sturdy storage case and supplied with tweezers for handling to protect against dirt and body oils. Sets consist of flat weights ranging from 1mg to 500mg and knob-style weights ranging from 1g to 100g. Masses from 1mg through 5mg are aluminum; the remainder are of stainless-steel construction. Custom sets are available and quoted upon request.

Calibration Weights



Report of Traceability

Each Denver Instrument weight or weight set is supplied with a report of traceability at no additional cost. This report identifies the tolerance class, type of construction and lists the NIST test number and date for the applicable Denver Instrument primary standard(s), the secondary set number and the technician's signature.

Certificate of Calibration

To order any Denver Instrument weight or weight set with a Certificate of Calibration, add a "C" to the end of the part # and contact Denver Instrument or your distributor for pricing.

Recertification Service

Weight values can change over time due to scratches, fingerprints, wear and even corrosion resulting from atmospheric contaminants. Regular checks on the accuracy of your mass standards will ensure the accuracy of your measurements. Our mass metrology lab provides this service at a very competitive price.

The Certificate of Calibration reports:

1. Nominal value
2. Conventional mass (the internationally recognized apparent mass versus 8.0g/cm^3 at an air density of 1.2 mg/cm^3 standard).
3. NIST test number and date for standards used.
4. NVLAP laboratory code.

Which Class is Right for My Application?

A balance should be calibrated using a weight with a class tolerance factor greater than the readability of the balance. Example: A toploading balance with readability of 0.01g may be calibrated with a weight having a known tolerance of at least 0.009g.

OIML E2 and Ulti-Mass Standards. These mass standards provide the greatest precision available from Denver Instrument Company. They are ideal for use as reference standards to calibrate other weights or for calibrating high-resolution analytical balances. The OIML E2 and Ulti-mass tolerances are approximately two times the precision of ANSI/ASTM Class 1.

ANSI/ASTM Class 1. Provides high precision. Can be used as reference standards in calibrating other weights and are appropriate for calibration of high-precision analytical balances.

ANSI/ASTM Class 2. Appropriate for calibrating high-precision toploading balances with readabilities ranging from 0.001g to 0.01g.

ANSI/ASTM Classes 3 and 4. Appropriate for calibrating balances with moderate precision, ranging from 0.01g to 0.1g.

Ordering Information

	OIML E2 Ulti-Mass® Part No.	Class 1 Part No.	Class 2 Part No.	ASTM Classes	
				Class 3 Part No.	Class 4 Part No.
Cylindrical Weights					
30g	02-225-001	02-225-66A	02-225-5A	02-225-26A	02-225-10A
40g	02-225-003	02-225-66B	02-225-5B	02-225-26B	02-225-10B
50g	02-225-005	02-225-66C	02-225-5C	02-225-26C	02-225-10C
100g	02-225-007	02-225-66D	02-225-5D	02-225-26D	02-225-10D
150g	02-225-009	02-225-66E	02-225-5E	02-225-26E	02-225-10E
160g	02-225-011	02-225-66F	02-225-5F	02-225-26F	02-225-10F
200g	02-225-013	02-225-66G	02-225-5G	02-225-26G	02-225-10G
300g	02-225-015	02-225-66H	02-225-5H	02-225-26H	02-225-10H
400g	02-225-017	02-225-66J	02-225-5J	02-225-26J	02-225-10J
500g	02-225-019	02-225-66K	02-225-5K	02-225-26K	02-225-10K
1Kg	02-225-021	02-225-66L	02-225-5M	02-225-26L	02-225-10L
2Kg	02-225-023	02-225-66M	02-225-5N	02-225-26M	02-225-10M
5Kg	02-225-025	02-225-66N	02-225-5P	02-225-26N	02-225-10N
Small Knob Weights					
1g	02-225-027	02-225-55A	02-225-60A	02-225-65A	02-225-70A
2g	02-225-029	02-225-55B	02-225-60B	02-225-65B	02-225-70B
5g	02-225-031	02-225-55C	02-225-60C	02-225-65C	02-225-70C
10g	02-225-033	02-225-55D	02-225-60D	02-225-65D	02-225-70D
20g	02-225-036	02-225-55E	02-225-60E	02-225-65E	02-225-70E
50g	02-225-038	02-225-55F	02-225-60F	02-225-65F	02-225-70F
100g	02-225-039	02-225-55G	02-225-60G	02-225-65G	02-225-70G
Flat mg Weights					
1mg	02-225-041	02-225-35A	02-225-40A	02-225-45A	02-225-50A
2mg	02-225-043	02-225-35B	02-225-40B	02-225-45B	02-225-50B
5mg	02-225-045	02-225-35C	02-225-40C	02-225-45C	02-225-50C
10mg	02-225-047	02-225-35D	02-225-40D	02-225-45D	02-225-50D
20mg	02-225-049	02-225-35E	02-225-40E	02-225-45E	02-225-50E
50mg	02-225-051	02-225-35F	02-225-40F	02-225-45F	02-225-50F
100mg	02-225-053	02-225-35G	02-225-40G	02-225-45G	02-225-50G
200mg	02-225-055	02-225-35H	02-225-40H	02-225-45H	02-225-50H
500mg	02-225-057	02-225-35J	02-225-40J	02-225-45J	02-225-50J
Weight Sets					
1mg-100g	02-225-059	02-225-15A	02-225-20A	02-225-25A	02-225-30A
10mg-50g	02-225-061	02-225-15B	02-225-20B	02-225-25B	02-225-30B
10mg-100g	02-225-063	02-225-15C	02-225-20C	02-225-25C	02-225-30C
1g-50g	02-225-065	02-225-15D	02-225-20D	02-225-25D	02-225-30D
1g-100g	02-225-067	02-225-15E	02-225-20E	02-225-25E	02-225-30E
100g-1Kg	02-225-069	02-225-8	02-301-5F	02-225-26P	02-235
Custom sets available upon request					



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