

OIML and ASTM Weights



CarePacs®

OIML Signature Line E1, E2, F1

OIML Standard Line E2, F1

OIML Basic Line F1, F2, M1

ASTM Classes 1–4

Industrial Weights F1 – M3

Accessories



Comprehensive Portfolio
For Consistent Performance

METTLER TOLEDO

Unrivalled Expertise Brought to You With Passion

METTLER TOLEDO is the world's leading manufacturer of balances and a significant supplier of weights, weight sets and related weight calibration services. The weight portfolio covers ANSI/ASTM and OIML weights from one milligram to five tons in all accuracy classes. Our customers all over the world use our weights for routine testing of balances and as primary standards in mass laboratories.



Vacuum melted steel for highest material purity

Vacuum melting of steel ensures consistent high quality through reduction of undesired trace elements, removal of dissolved gases and improvement of oxide cleanliness.

Page | 4

Expertise



Overview of weight portfolio, technical specifications and weight calibration services

6

Routine Testing



Basics of routine testing of balances and weight handling

8

CarePacs® for Routine Testing



Benefits of routine testing with CarePacs®



10

Weight Calibration Service



Description of calibration service for weights

12

Traceability and Weight Classes

	E1	E2	F1
	mg	mg	mg
5000 kg			25000
3000 kg			
2000 kg			10000
1000 kg		1600	5000
500 kg		800	2500
300 kg			
200 kg		300	1000
100 kg		160	500
50 kg	25	80	250

OIML weight tolerances and traceability chart

14

Order Numbers

△△	△△	△△	△△	△
△	△	△	△	△
△	△	△	△	△
△△	△△	△△	△△	△
△	△	△	△	△
■		■	■	■
■		■	■	■
■		■	■	■
■		■	■	■
■		■	■	■

Order numbers of complete weight portfolio

26

NoWait Weights



Waiting can be frustrating! Our most common CarePacs and weights are guaranteed in stock

An Extensive Weight Portfolio at Reasonable Cost

Choose from a comprehensive selection of weights and related calibration services. We offer you weights and services of highest quality – also for users with limited budget. Building on many years of experience and customer feedback, our weight boxes and accessories have an unmatched reputation. Profit from short recalibration times and trustworthy services with our global network of accredited mass laboratories.



State-of-the-art turning procedures

New developments in state-of-the-art inserts for stainless steel turning such as improved coatings, and stronger substrates, in combination with proven turning principles and techniques, result in best possible surface finishes.

OIML Weights



Weights are available in OIML classes E1, E2, F1, F2, M1, M2 and M3 matching all requirements of OIML R111-1:2004. Nominal values range from 1 mg to 5 tons, satisfying all industry and customer specific needs.

ANSI/ASTM Weights



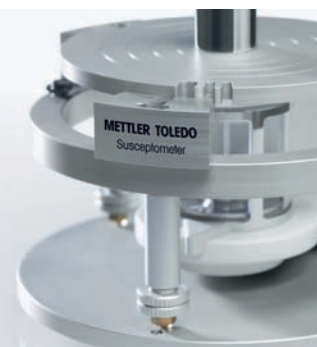
ASTM weights are available in classes 1–6 matching requirements of ANSI/ASTM E617. Nominal values range from 1 mg to 20 kg, satisfying all industry and customer specific needs.

Design and Construction

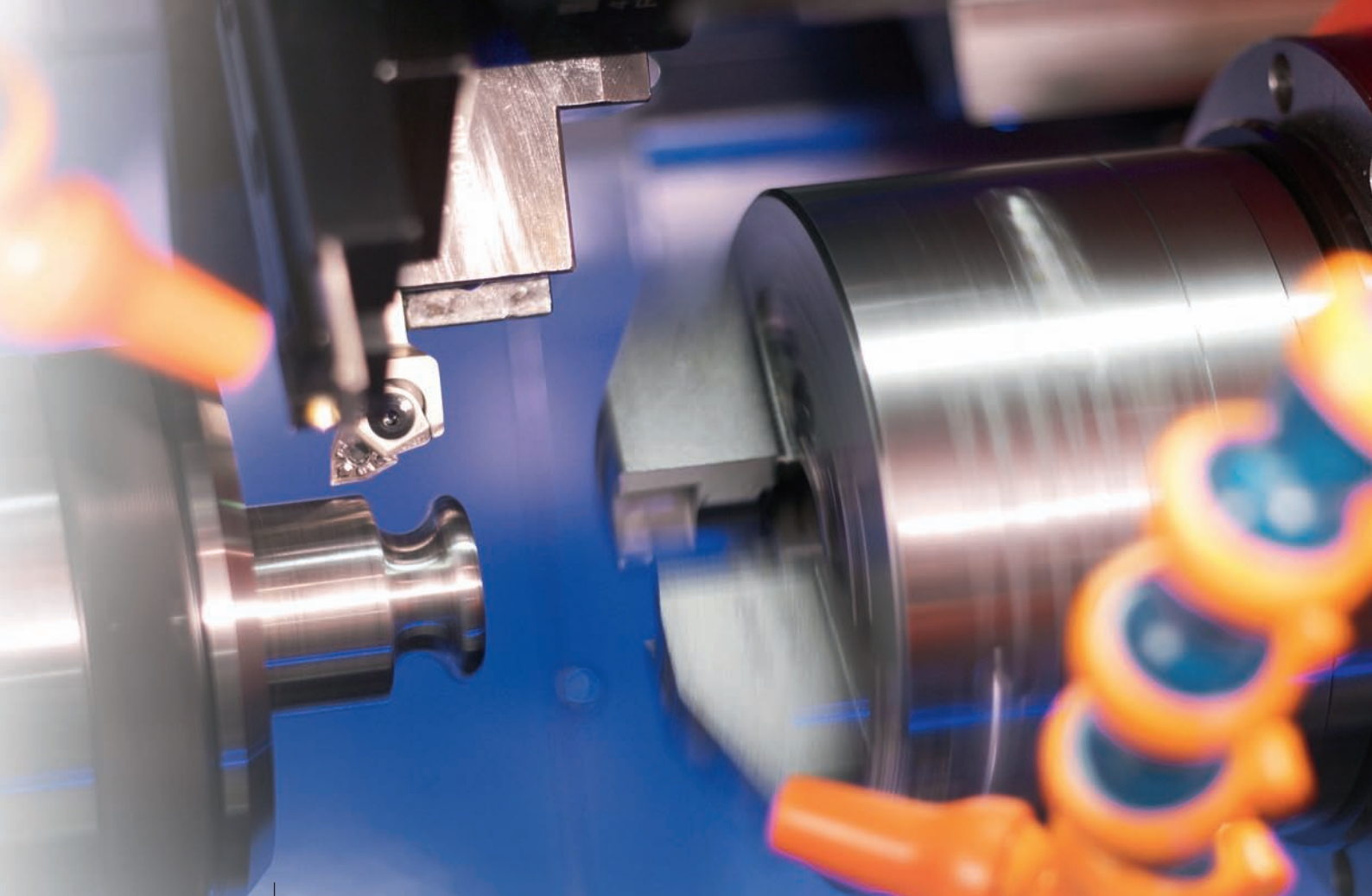


All weights are made of premium stainless steel to make them corrosion resistant. Monobloc weights are specially designed for long term stability, and weights with an adjusting cavity provide best value for money. Electrolytic polishing ensures glossy surfaces for anti adhesion effects.

Technical Specifications



Magnetization and susceptibility of all weights are strictly controlled to ensure compliance with standards. The steel used is vacuum melted and has a density of 8.0 kg/dm³, a homogenous structure, and best purity.



Traceability of Weights



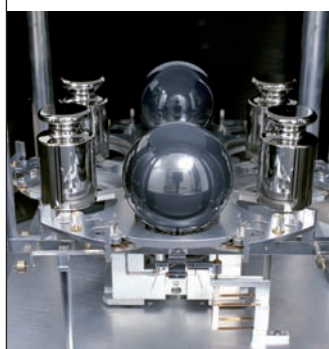
All weights are manufactured with reference and traceability to the International Prototype Kilogram at the BIPM (International Bureau of Weights and Measures) near Paris. All manufacturing processes are in accordance with METTLER TOLEDO's ISO 9001 registration, and the ISO 14001 environmental standard.

Weight Boxes



Traditional wooden boxes are still preferred in many mass labs while plastic boxes better serve the regulated and other industries. Impact resistant plastic boxes and high quality foam inserts do not show any dissolve effects or residues even after years of use. Labels are tested for high resistance against cleaning liquids.

Weight Calibration



A global network of 11 mass laboratories in Switzerland and other key markets guarantee fast and cost effective calibrations no matter where our customers are.

Accessories



Ergonomic tweezers and weight forks as well as clean-room approved gloves and cleaning cloths meet highest requirements of all industries and assure professional testing.

Sustainable Product Quality through Routine Testing

METTLER TOLEDO's Good Weighing Practice™ approach to risk evaluation of weighing processes, supports you from the selection of your weighing system right through to professional design of routine testing of balances.



Polishing is an industrial art

Experience combined with special skills acquired through years of weight polishing guarantee the consistent high quality our customers demand.

Recommendations of Good Weighing Practice™

GWP® provides recommendations for frequency and time intervals of balance calibration and verification to ensure accurate weighing. GWP® indicates the relevant test weights, routine tests, warning and control limits and provides the necessary standard operation procedure (SOP).

Customer Benefits of Good Weighing Practice™

- More efficient testing
- Reduced measurement deviations
- Increased process safety

For more information

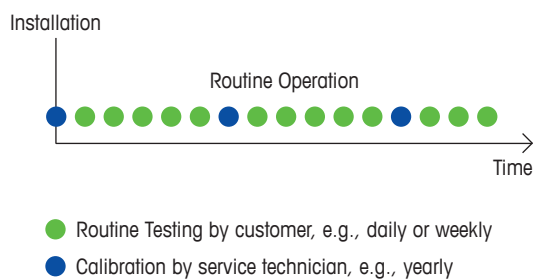
► www.mt.com/GWP



GWP® Recommendations on Testing Frequency

Testing frequency for routine testing of balances depends on many factors such as process risk and balance technology. The following general recommendations apply:

- Balances without FACT technology require higher testing frequencies compared to balances with FACT.
- Stringent process tolerances and associated higher risks require more frequent testing.

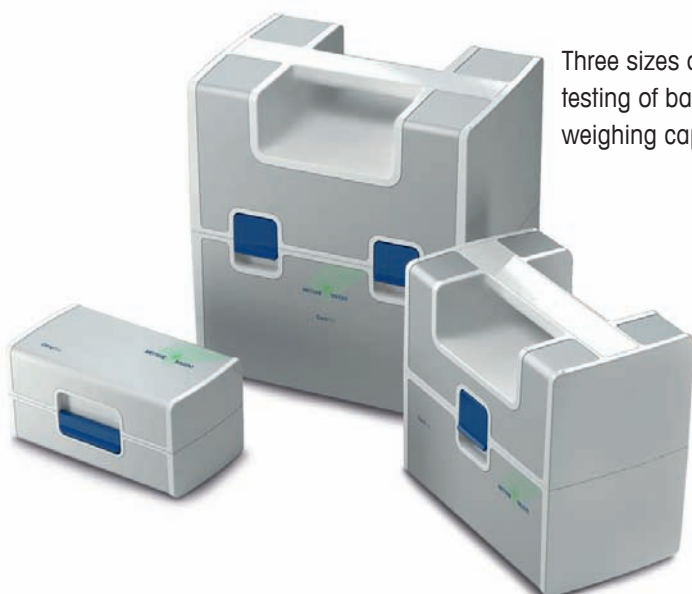


Weight Handling Tips

- Never touch weights with bare hands: always use synthetic gloves for weight handling. Refer to accessory section of this brochure for professional weight handling tools such as tweezers, synthetic gloves and cloths.
- Store weights in the original box after use.
- Allow weights sufficient time for acclimatization prior to balance testing, as temperature difference between test weight and balance may have impact on test results.
- Remove loose dust from weights with a soft brush or rubber bellows prior to testing.

Professional CarePacs® for Smooth Routine Testing

Perform routine testing of balances securely with only what you need – two test weights. Save time and cost with a METTLER TOLEDO CarePac®. This unique approach means you can rely on accurate measuring results. CarePacs® include tweezers, gloves and other accessories for professional weight handling.



Three sizes of CarePacs® allow testing of balances up to 8 kg weighing capacity.

Routine Testing of Balances

Eccentricity Test

Preparation

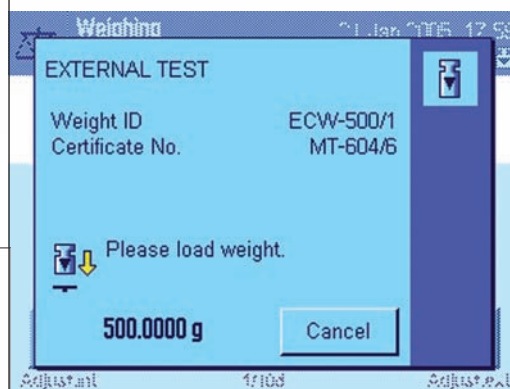
- Before the test is performed, the test weight must be acclimated to the ambient temperature of the balance.
- Prepare a sheet to note the readings of the eccentricity test points (2 to 5).

Test Procedure

- Place the test weight in the center (1) and tare (if required press zero).
- Place the weight on position 2 at "left front".
- Note:** Move the weights by lifting them; do not shift weights on the pan.
- Read the stable value from the display and note it.
- Repeat the measurements on positions 3, 4 and 5.

SOPs to Ensure Accuracy

Routine testing is one of three aspects of professional monitoring of the accuracy of a balance. SOPs from METTLER TOLEDO give clear guidance as to how to perform this important task reliably.



Maintain Process Tolerances

Fully supporting routine testing with external weights, CarePacs® offer a convenient and cost-effective way of limiting the risk of working outside of specified process tolerances.



Customer specific 3rd Weight
CarePacs® offer option to add a third weight for customer specific testing.

CarePac® Medium

Security through Superior Accessories

Ergonomic tweezers and weight forks as well as clean-room approved gloves and cleaning cloths meet the highest requirements of all industries and assure professional testing.



Save Time and Money

Routine testing is performed with two weights only at maximum and minimum load. Weights are specified to validate process tolerances up to 0.03%.

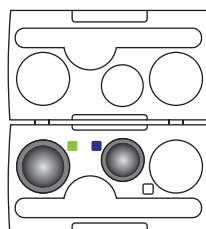


CarePac® Sizes

Balance Max. Load

Small

Up to 490 g

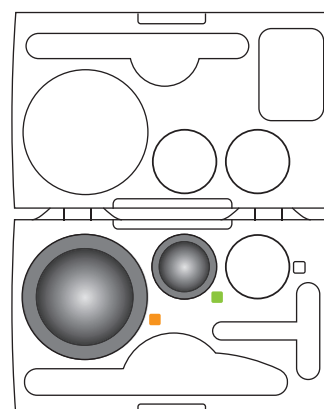


Medium

From 500 g to 4900 g

Large

From 5 kg to 8 kg



For more information:

► www.mt.com/carepacs

Weight Calibration

the Cornerstone for Secure Testing

Accurately calibrated weights are at the base of accurate weighing results. Balances should always be checked with reference weights you can rely on and trust. At our accredited mass laboratory, we calibrate, adjust and document the results in a calibration certificate. The calibration services cover the basic reporting of conventional mass correction, uncertainty and traceability information in accordance with ISO/IEC 17025 requirements.

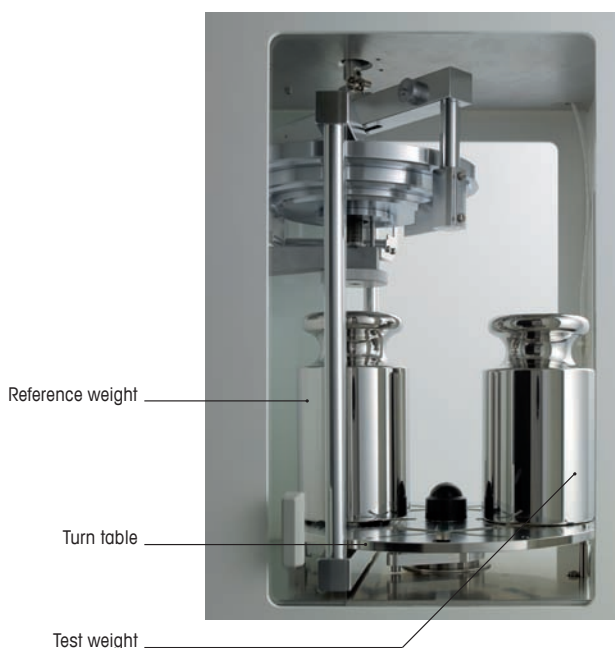


Unique weight adjustment procedure

Electrolytic adjustment of weights is a unique technique of METTLER TOLEDO to achieve surface roughness which far exceed required specifications.

Offering

- Calibration by ISO/IEC 17025 accredited laboratory ("as left" values)
- Traceable, accredited calibration certificate
- Statement of conformity for the accuracy class
- Certificates in English (other languages on request)
- Professional weight cleaning
- Faulty weights replaced by METTLER TOLEDO original weights
- Re-adjustment of adjustable weights
- Statement of additional "as found" values (e. g. before adjustment)
- Reminder service from METTLER TOLEDO for weights due for calibration
- Priority service for quickest turn-around time
- Archiving of calibration history of weights



Feature	Benefit
Accredited Mass Laboratory	Accreditation in accordance with ISO/IEC 17025 ensures independent auditing of a labs technical competence.
Weight cleaning	Insures your weights are within original state to guarantee conditions for every balance check.
Re-adjustment of weights	Out of specification weights are adjusted to save costs, and weights can be used again for calibration purposes.



Refer to page 26



Benefits of calibrating your weights at METTLER TOLEDO:

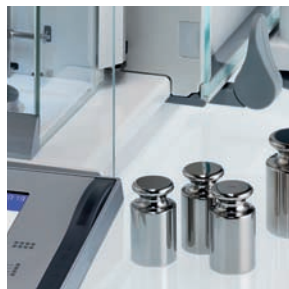
- The only company in the world with a global network of 11 mass laboratories
- Network allows competence testing among own mass laboratories and with other partners in the industry
- Global leader in manufacturing state-of-the-art mass comparators, which are used in our mass laboratories
- All accredited mass laboratories meet or exceed ISO/IEC 17025, FDA, GMP, and requirements of nuclear industry
- Dense network ensures short turn around time for weight recalibration

Weight Calibration Process

Weight calibration by an accredited Mass Laboratory under the scope of ISO/IEC 17025 is the only way to obtain accurate and reliable data. METTLER TOLEDO's weight calibration process is shown below.



Each weight is cleaned prior to the actual calibration process to ensure defined conditions for each calibration.



Stabilization of cleaned weights is important to ensure stable surface conditions prior to calibration.



Weight calibration process is performed following procedures of ISO/IEC 17025.



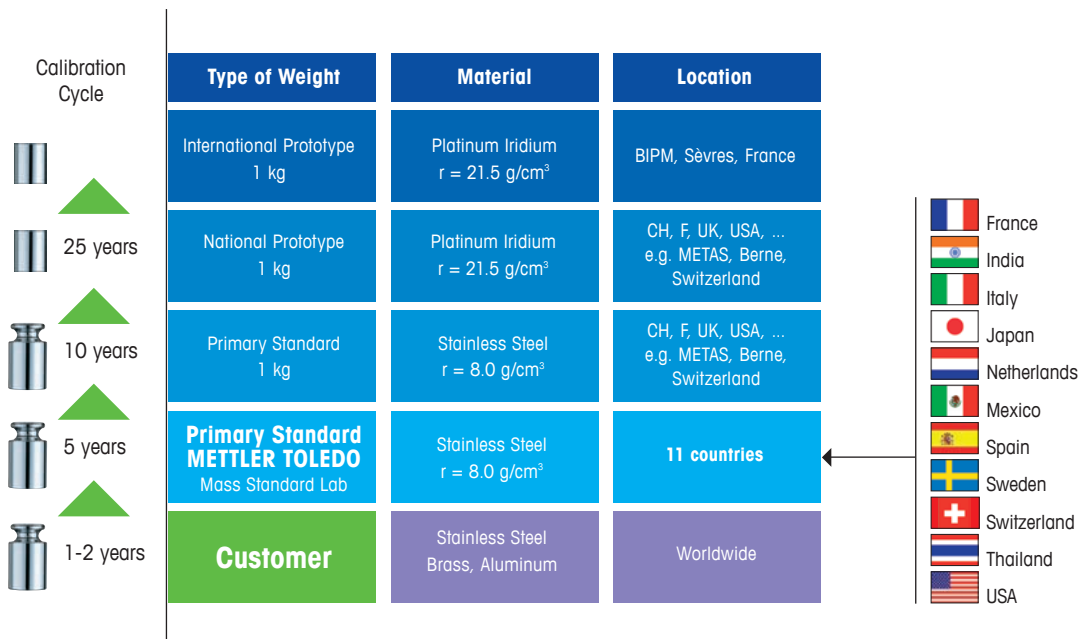
Calibration results, including measurement uncertainty statement, are reported in a certificate.

Traceable Weights Translate into Trustworthy Results

Traceability is defined in the International Vocabulary of Basic and General Terms in Metrology (ISO, 2008) as the "property of a measurement whereby the result can be related to a reference, through a documented unbroken chain of calibrations, each contributing to the measurement uncertainty."

All of METTLER TOLEDO's calibration laboratories for weights are accredited to ISO/IEC 17025 and arrange for the following to ensure traceability of calibrated weights:

- An **unbroken chain of comparisons** is achieved by using primary standards which are traceable to national and international standards, and finally to the prototype kilogram at the International Bureau of Weights and Measures (BIPM) in Sèvres, near Paris.
- **Measurement uncertainty**, assigned to each calibration, and clearly stated on the calibration certificates for weights.
- **Documentation**, normally a calibration certificate, showing all results including uncertainties and other information required by the standard ISO/IEC 17025.
- **Competence**, demonstrated by actively participating in proficiency testing in cooperation with industry and government partners.
- All weight references are metrologically traceable to **SI unit of mass**.
- **Recalibrations** of primary, working and check standards at appropriate intervals, which insures their accuracy and traceability.



OIML and ASTM Tolerances

International Organization of
Legal Metrology Recommendation R111

	E1	E2	F1	F2	M1	M2	M3
	mg	mg	mg	mg	mg	mg	mg
5000 kg			25000	80000	250000	800000	2500000
3000 kg							
2000 kg			10000	30000	100000	300000	1000000
1000 kg		1600	5000	16000	50000	160000	500000
500 kg		800	2500	8000	25000	80000	250000
300 kg							
200 kg		300	1000	3000	10000	30000	100000
100 kg		160	500	1600	5000	16000	50000
50 kg	25	80	250	800	2500	8000	25000
30 kg							
25 kg							
20 kg	10	30	100	300	1000	3000	10000
10 kg	5	16	50	160	500	1600	5000
5 kg	2.5	8.0	25	80	250	800	2500
3 kg							
2 kg	1	3	10	30	100	300	1000
1 kg	0.5	1.6	5	16	50	160	500
500 g	0.25	0.8	2.5	8.0	25	80	250
300 g							
200 g	0.1	0.3	1.0	3	10	30	100
100 g	0.05	0.16	0.5	1.6	5.0	16	50
50 g	0.03	0.10	0.3	1.0	3.0	10	30
30 g							
20 g	0.025	0.08	0.25	0.8	2.5	8.0	25
10 g	0.020	0.06	0.20	0.6	2.0	6.0	20
5 g	0.016	0.05	0.16	0.5	1.6	5.0	16
3 g							
2 g	0.012	0.04	0.12	0.4	1.2	4.0	12
1 g	0.010	0.03	0.10	0.3	1.0	3.0	10
500 mg	0.008	0.025	0.08	0.25	0.8	2.5	
300 mg							
200 mg	0.006	0.020	0.06	0.20	0.6	2.0	
100 mg	0.005	0.016	0.05	0.16	0.5	1.6	
50 mg	0.004	0.012	0.04	0.12	0.4		
30 mg							
20 mg	0.003	0.010	0.030	0.10	0.30		
10 mg	0.003	0.008	0.025	0.08	0.25		
5 mg	0.003	0.006	0.020	0.06	0.20		
3 mg							
2 mg	0.003	0.006	0.020	0.06	0.20		
1 mg	0.003	0.006	0.020	0.06	0.20		

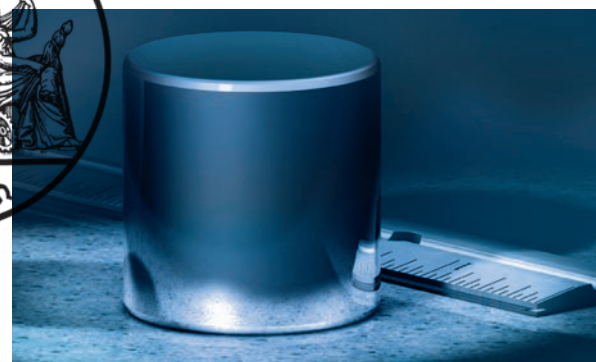
The nominal weight values in this table specify the smallest and largest weight permitted in any class of R 111 (for OIML weights), and E617 (for ASTM weights), and the maximum permissible errors and denominations shall not be extrapolated to higher or lower values. For example, the smallest nominal value for a weight in OIML class M2 is 100 mg while the largest is 5000 kg. A 50 mg weight would not be accepted as an R 111 class M2 weight and instead should meet class M1 maximum permissible errors and other requirements (e.g. shape or markings) for that class of weight. Otherwise the weight cannot be described as complying with R 111-1:2004.

ANSI/ASTM
E617

0	1	2	3	4	5	6	7
mg	mg	mg	mg	g/mg	g/mg	g/mg	g/mg
				100 g	250 g	500 g	750 g
				60 g	150 g	300 g	450 g
				40 g	100 g	200 g	300 g
				20 g	50 g	100 g	150 g
				10 g	25 g	50 g	75 g
				6 g	15 g	30 g	45 g
				4 g	10 g	20 g	30 g
				2 g	5 g	10 g	15 g
63	125	250	500	1 g	2.5 g	5 g	7.5 g
38	75	150	300	600 mg	1.5 g	3 g	4.5 g
31	62	125	250	500	1.2 g	2.5 g	4.5 g
25	50	100	200	400	1.0 g	2 g	3.8 g
13	25	50	100	200	500 mg	1 g	2.2 g
6	12	25	50	100	250	500 mg	1.4 g
3.8	7.5	15	30	60	150	300	1.0 g
2.5	5	10	20	40	100	200	750 mg
1.3	2.5	5	10	20	50	100	470
0.6	1.2	2.5	5	10	30	50	300
0.38	0.75	1.5	3	6	20	30	210
0.25	0.5	1	2	4	15	20	160
0.13	0.25	0.5	1	2	9	10	100
0.06	0.12	0.25	0.6	1.2	5.6	7	...
0.037	0.074	0.15	0.45	0.9	4	5	44
0.037	0.074	0.1	0.35	0.7	3	3	33
0.025	0.05	0.074	0.25	0.5	2	2	21
0.017	0.034	0.054	0.18	0.36	1.3	2	13
0.017	0.034	0.054	0.15	0.3	0.95	2.0	9.4
0.017	0.034	0.054	0.13	0.26	0.75	2.0	7
0.017	0.034	0.054	0.1	0.2	0.5	2.0	4.5
0.005	0.01	0.025	0.08	0.16	0.38	1	3
0.005	0.01	0.025	0.07	0.14	0.3	1	2.2
0.005	0.01	0.025	0.06	0.12	0.26	1	1.8
0.005	0.01	0.025	0.05	0.1	0.2	1	1.2
0.005	0.01	0.014	0.042	0.085	0.16	0.5	0.88
0.005	0.01	0.014	0.038	0.075	0.14	0.5	0.68
0.005	0.01	0.014	0.035	0.07	0.12	0.5	0.56
0.005	0.01	0.014	0.03	0.06	0.1	0.5	0.4
0.005	0.01	0.014	0.028	0.055	0.08	0.2	...
0.005	0.01	0.014	0.026	0.052	0.07	0.2	...
0.005	0.01	0.014	0.025	0.05	0.06	0.2	...
0.005	0.01	0.014	0.025	0.05	0.05	0.1	...



International Prototype Kilogram
(IPK) at BIPM, a cylinder made of
90% platinum and 10% iridium.



Overview

Weights and Weight Sets



15 CarePacs®
For balances with max. load of 8 kg



16 Signature Line Weights
Monobloc weights of OIML Classes E1, E2, F1



18 Standard Line Weights
Monobloc weights of OIML Classes E2, F1



20 Basic Line Weights
Weights with adjusting cavity of OIML Classes F1, F2, M1



22 ASTM Weights
Weights with adjusting cavity of ASTM Classes 1, 2, 3, 4



24 Industrial Weights
Weights with adjusting cavity of OIML Classes F1, F2, M1, M2, M3, NIST F



25 Accessories
For professional weight handling

Color Code

OIML

ASTM

	E1	E2	F1	F2	M1	M2	M3
0	1	2	3	4	5	6	7
						F	

For tolerances refer to page 13

CarePac® S

Weighing ranges up to 490 g



Refer to page 26



Balances	XP205 XP204S MS205 XP203S MS304S XS205 MS204S XS204 MS303S XP404S XS203S ML204 XS403S XA204 ML203 MS403S XA303S ML303		XP105 XS105 XS104 XA105 MS105 MS104S ML104		XP56 XS64 ML54 HR83 HG63 HB43-S		XP26 MJ33		XP6		XP2U XS3	
OIML												
Set up	200 g F2		200 g F2		100 g F2		50 g F2		20 g F1		5 g E2	
	20 g F1		10 g F1		5 g E2		2 g E2		1 g E2		0.2 g E2	
Order No.	11123000		11123001		11123002		11123003		11123006		11123005	
ASTM												
Set up	200 g 1		200 g 1		100 g 1		50 g 1		20 g 1		5 g 1	
	20 g 1		10 g 1		5 g 1		2 g 1		1 g 1		0.2 g 1	
Order No	11123100		11123101		11123102		11123103		11123106		11123105	

CarePac® M

Weighing ranges 500 g – 4900 g



Balances	XP504 MS603S XP603S ML503 XP802S ML802 XS603S XS802S XA503S		XP1203S MS1003S XP1202S MS1602S XS1003S ML1602 XA1502S ML1502		XP2003S MS3002S XP2002S ML3002 XP2001S ML2001 XS2002S XA3002S XA3001S		XP4002S XP4001S XS4002S XS4001S MS4002S ML4002 ML4001	
OIML								
Set up	500 g F2		1000 g F2		2000 g F2		2000 g F2	
	20 g F1		50 g F2		100 g F2		200 g F2	
Order No.	11123007		11123008		11123009		11123010	
ASTM								
Set up	500 g 1		1000 g 1		2000 g 1		2000 g 4	
	20 g 1		50 g 1		100 g 1		200 g 4	
Order No	11123107		11123108		11123109		11123110	

CarePac® L

Weighing ranges 5 kg – 8 kg

Balances	XP5003S XS8001S XP8002S XS6001S XP6002S XA5002S XP8001S MS6002S XP6001S MS8001S XS5003S MS6001S XS6002S ML6001	
OIML		
Set up	5000 g F2	
	200 g F2	
Order No.	11123011	
ASTM		
Set up	5000 g 4	
	200 g 4	
Order No	11123111	

Only base models of balances are listed. DR, DU, X or E types need the same CarePac as the base models.

CarePacs® for non-current METTLER TOLEDO models or 3rd party balances

OIML										
Set up	200 g F2	100 g F2	50 g F2	200 g F2	100 g F2	500 g F2	1000 g F2	2000 g F2	5000 g F2	5000 g F2
	50 g F2	50 g F2	50 g F2	100 g F2	100 g F2	10 g F1	10 g F1	10 g F1	500 g F2	100 g F2
Order No.	11123026	11123027	11123028	11123029	11123030	11123036	11123037	11123038	11123012	11123042
ASTM										
	200 g 1	100 g 1	50 g 1	200 g 1	100 g 1	500 g 1	1000 g 1	2000 g 1	5000 g 4	5000 g 1
	50 g 1	50 g 1	50 g 1	100 g 1	100 g 1	10 g 1	10 g 1	10 1	500 g 4	100 g 1
Order No	11123126	11123127	11123128	11123129	11123130	11123136	11123137	11123138	11123112	11123142

Customized 3rd Weight

3rd weights are for customized testing.

	OIML Class E2 Order No.		ASTM Class 1 Order No.	
Value				
1 mg	11123044		11123144	
2 mg	11123045		11123145	
5 mg	11123046		11123146	
10 mg	11123047		11123147	
20 mg	11123048		11123148	
50 mg	11123049		11123149	
100 mg	11123050		11123150	
200 mg	11123051		11123151	
500 mg	11123052		11123152	

For quotes or technical information regarding weights please use the email address below.

► weights@mt.com

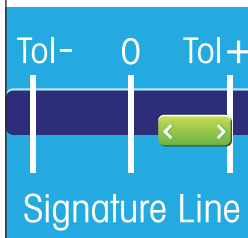
Signature Line

OIML E1, E2 and F1



The Signature Line offers more than perfection. Hand selected weights with guaranteed positive tolerances and a life-time guarantee make these weights the first choice for ambitious testing purposes.

Guaranteed Positive Tolerances



Our unique adjustment process maximizes the life of your weight by ensuring the weight is in the upper range of the tolerance. This minimizes the effects of weight loss due to use.

Full Lifetime Guarantee



The "Stay-in-tolerance" lifetime guarantee means that if ever a weight should be found out of tolerance it will be replaced free of charge.

High-grade stainless steel, vacuum melted
Density: 8.0 kg/dm³
Magnetic susceptibility < 0.01
One-piece design (Monobloc)

Weight and Box
Weight and Box, including Certificate

△ Wire weight
△ Marked wire weight
■ Cylindrical weight with knob
■ Marked cylindrical weight with knob

Individual Weights

Nominal value	Shape	E1		E2	
		Order number Weight in Wooden Box		Order number Weight in Plastic Box	
1 mg	△	00159000	00159001	—	30003706
2 mg	△	00159010	00159011	—	30003707
5 mg	△	00159020	00159021	—	30003710
10 mg	△	00159030	00159031	—	30003711
20 mg	△	00159040	00159041	—	30003712
50 mg	△	00159050	00159051	—	30003713
100 mg	△	00159060	00159061	—	30003714
200 mg	△	00159070	00159071	—	30003715
500 mg	△	00159080	00159081	—	30003716
1 g	■	00159090	00159091	—	30003717
2 g	■	00159100	00159101	—	30003718
5 g	■	00159110	00159111	—	30003719
10 g	■	00159120	00159121	—	30003720
20 g	■	00159130	00159131	—	30003721
50 g	■	00159140	00159141	—	30003722
100 g	■	00159150	00159151	—	30003723
200 g	■	00159160	00159161	—	30003724
500 g	■	00159170	00159171	—	30003725
1 kg	■	00159180	00159181	—	30003726
2 kg	■	00159190	00159191	—	30003727
5 kg	■	00159200	00159201	—	30003728
10 kg	■	00159210	00159211	—	30003729
20 kg	■	00159220	00159221	—	30003730
50 kg	■	00159230	00159231	—	30003731

Individual Weights

Nominal value	Shape	F1	
		Order number Weight in Plastic Box	
1 mg	△	—	30003743
2 mg	△	—	30003744
5 mg	△	—	30003745
10 mg	△	—	30003746
20 mg	△	—	30003747
50 mg	△	—	30003748
100 mg	△	—	30003749
200 mg	△	—	30003750
500 mg	△	—	30003751
1 g	■	—	30003752
2 g	■	—	30003753
5 g	■	—	30003754
10 g	■	—	30003755
20 g	■	—	30003756
50 g	■	—	30003757
100 g	■	—	30003758
200 g	■	—	30003759
500 g	■	—	30003760
1 kg	■	—	30003761
2 kg	■	—	30003762
5 kg	■	—	30003763
10 kg	■	—	30003764
20 kg	■	—	30003765
50 kg	■	—	30003766

Weight Sets

Weight Sets	E1									E2							
	1 mg 500 mg	1 mg 200 g	1 mg 1 kg	1 mg 2 kg	1 mg 5 kg	1 g 50 g	1 g 500 g	1 mg 1 kg	1 kg 5 kg	1 mg 500 mg	1 mg 200 g	1 mg 1 kg	1 mg 2 kg	1 mg 5 kg	1 g 50 g	1 g 500 g	1 kg 5 kg
1 mg	△	△	△	△	△			△△		△	△	△	△	△			
2 mg	△△	△△	△△	△△	△△			△△		△△	△△	△△	△△	△△			
5 mg	△	△	△	△	△			△△		△	△	△	△	△			
10 mg	△	△	△	△	△			△△		△	△	△	△	△			
20 mg	△△	△△	△△	△△	△△			△△		△△	△△	△△	△△	△△			
50 mg	△	△	△	△	△			△△		△	△	△	△	△			
100 mg	△	△	△	△	△			△△		△	△	△	△	△			
200 mg	△△	△△	△△	△△	△△			△△		△△	△△	△△	△△	△△			
500 mg	△	△	△	△	△			△△		△	△	△	△	△			
1 g		■	■	■	■	■	■	■			■	■	■	■	■	■	
2 g		■	■	■	■	■	■	■			■	■	■	■	■	■	
5 g		■	■	■	■	■	■	■			■	■	■	■	■	■	
10 g		■	■	■	■	■	■	■			■	■	■	■	■	■	
20 g		■	■	■	■	■	■	■			■	■	■	■	■	■	
50 g		■	■	■	■	■	■	■			■	■	■	■	■	■	
100 g		■	■	■	■		■	■			■	■	■	■		■	
200 g		■	■	■	■		■	■			■	■	■	■		■	
500 g			■	■	■		■	■				■	■	■		■	
1 kg			■	■	■			■	■			■	■	■			■
2 kg				■	■				■				■	■			■
5 kg					■				■					■			■
No. of Weights	12	23	25	27	28	8	12	38	4	12	23	25	27	28	8	12	4
Weights in Wooden Box	00159300	00159340	00159350	11117614	11117616	00159310	00159320	00159360	00159330								
	00159301	00159341	00159351	11117615	11117617	00159311	00159321	00159361	00159331								
Weights in Plastic Box																	
										30003732	30003734	30003735	30003736	30003737	30003738	30003739	30003740



Weight Sets

	F1							
	1 mg 500 mg	1 mg 200 g	1 mg 1 kg	1 mg 2 kg	1 mg 5 kg	1 g 50 g	1 g 500 g	1 kg 5 kg
1 mg	△	△	△	△	△			
2 mg	△△	△△	△△	△△	△△			
5 mg	△	△	△	△	△			
10 mg	△	△	△	△	△			
20 mg	△△	△△	△△	△△	△△			
50 mg	△	△	△	△	△			
100 mg	△	△	△	△	△			
200 mg	△△	△△	△△	△△	△△			
500 mg	△	△	△	△	△			
1 g		■	■	■	■	■	■	
2 g		■	■	■	■	■	■	
5 g		■	■	■	■	■	■	
10 g		■	■	■	■	■	■	
20 g		■	■	■	■	■	■	
50 g		■	■	■	■	■	■	
100 g		■	■	■	■		■	
200 g		■	■	■	■		■	
500 g			■	■	■		■	
1 kg			■	■	■			■
2 kg				■	■			■
5 kg					■			■
No. of Weights	12	23	25	27	28	8	12	4
Weights in Plastic Box	30003767	30003768	30003769	30003770	30003771	30003772	30003773	30003774

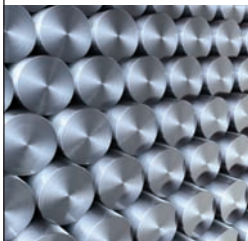
Standard Line

OIML E2 and F1



Uncompromising selection of steel and rigorous control of manufacturing processes make these weights the excellent choice for balance calibration and testing. The proven one-piece design (monobloc) guarantees best long term stability and accurate testing results.

Austenitic Stainless Steel



Specially used, stainless steel ensures an anti-corrosive surface with low magnetization and susceptibility values.

Solid, one-piece Construction



The one-piece construction and high-gloss polished surface offer best long term stability.

Stainless steel
Density: 7.9 kg/dm³

☐ Weight and Box
☐ Weight and Box, **including Certificate**



Calibration at ISO 17025:2005
A2LA accredited lab
Worthington, OH

☐ Sheet weight
☐ Marked sheet weight
☒ Cylindrical weight with knob
☒ Marked cylindrical weight with knob

Individual Weights

E2

Nominal value	Shape	Order number Weight in Plastic Box	
1 mg	<input type="checkbox"/>	30014210	00158307
2 mg	<input type="checkbox"/>	30014211	00158317
5 mg	<input type="checkbox"/>	30014212	00158327
10 mg	<input type="checkbox"/>	30014213	00158337
20 mg	<input type="checkbox"/>	30014214	00158347
50 mg	<input type="checkbox"/>	30014215	00158357
100 mg	<input type="checkbox"/>	30014216	00158367
200 mg	<input type="checkbox"/>	30014217	00158377
500 mg	<input type="checkbox"/>	30014218	00158387
1 g	<input checked="" type="checkbox"/>	30014219	00158397
2 g	<input checked="" type="checkbox"/>	30014220	00158407
5 g	<input checked="" type="checkbox"/>	30014221	00158417
10 g	<input checked="" type="checkbox"/>	30014222	00158427
20 g	<input checked="" type="checkbox"/>	30014223	00158437
50 g	<input checked="" type="checkbox"/>	30014224	00158447
100 g	<input checked="" type="checkbox"/>	30014225	00158457
200 g	<input checked="" type="checkbox"/>	30014226	00158467
500 g	<input checked="" type="checkbox"/>	30014227	00158477
1 kg	<input checked="" type="checkbox"/>	30014228	00158487
2 kg	<input checked="" type="checkbox"/>	30014229	00158497
5 kg	<input checked="" type="checkbox"/>	30014230	00158507
10 kg	<input checked="" type="checkbox"/>	30014231	00158517
20 kg	<input checked="" type="checkbox"/>	30014232	00158527

Individual Weights

F1

Nominal value	Shape	Order number Weight in Plastic Box	
1 mg	<input type="checkbox"/>	30014241	00159417
2 mg	<input type="checkbox"/>	30014242	00159427
5 mg	<input type="checkbox"/>	30014243	00159437
10 mg	<input type="checkbox"/>	30014244	00159447
20 mg	<input type="checkbox"/>	30014245	00159457
50 mg	<input type="checkbox"/>	30014246	00159467
100 mg	<input type="checkbox"/>	30014247	00159477
200 mg	<input type="checkbox"/>	30014248	00159487
500 mg	<input type="checkbox"/>	30014249	00159497
1 g	<input checked="" type="checkbox"/>	30014250	00158607
2 g	<input checked="" type="checkbox"/>	30014251	00158617
5 g	<input checked="" type="checkbox"/>	30014252	00158627
10 g	<input checked="" type="checkbox"/>	30014253	00158637
20 g	<input checked="" type="checkbox"/>	30014254	00158647
50 g	<input checked="" type="checkbox"/>	30014255	00158657
100 g	<input checked="" type="checkbox"/>	30014256	00158667
200 g	<input checked="" type="checkbox"/>	30014257	00158677
500 g	<input checked="" type="checkbox"/>	30014258	00158687
1 kg	<input checked="" type="checkbox"/>	30014259	00158697
2 kg	<input checked="" type="checkbox"/>	30014260	00158707
5 kg	<input checked="" type="checkbox"/>	30014261	00158717
10 kg	<input checked="" type="checkbox"/>	30014262	00158727
20 kg	<input checked="" type="checkbox"/>	30014263	00158737

Weight Sets

E2

	1 mg 500 mg	1 mg 200 g	1 mg 1 kg	1 mg 2 kg	1 mg 5 kg	1 g 50 g	1 g 500 g	1 kg 5 kg
1 mg	△	△	△	△	△			
2 mg	△△	△△	△△	△△	△△			
5 mg	△	△	△	△	△			
10 mg	△	△	△	△	△			
20 mg	△△	△△	△△	△△	△△			
50 mg	△	△	△	△	△			
100 mg	△	△	△	△	△			
200 mg	△△	△△	△△	△△	△△			
500 mg	△	△	△	△	△			
1 g		■	■	■	■	■	■	
2 g		■	■	■	■	■	■	
5 g		■	■	■	■	■	■	
10 g		■	■	■	■	■	■	
20 g		■	■	■	■	■	■	
50 g		■	■	■	■	■	■	
100 g		■	■	■	■		■	
200 g		■	■	■	■		■	
500 g			■	■	■		■	
1 kg			■	■	■			■
2 kg				■	■			■
5 kg					■			■
No. of Weights	12	23	25	27	28	8	12	4
Weights in Plastic Box	30014233 00158807	30014234 00158847	30014235 00158857	30014236 11117322	30014237 11117324	30014238 00158817	30014239 00158827	30014240 11125901

Weight Sets

F1

	1 mg 500 mg	1 mg 200 g	1 mg 1 kg	1 mg 2 kg	1 mg 5 kg	1 g 50 g	1 g 500 g	1 kg 5 kg
1 mg	△	△	△	△	△			
2 mg	△△	△△	△△	△△	△△			
5 mg	△	△	△	△	△			
10 mg	△	△	△	△	△			
20 mg	△△	△△	△△	△△	△△			
50 mg	△	△	△	△	△			
100 mg	△	△	△	△	△			
200 mg	△△	△△	△△	△△	△△			
500 mg	△	△	△	△	△			
1 g		■	■	■	■	■	■	
2 g		■	■	■	■	■	■	
5 g		■	■	■	■	■	■	
10 g		■	■	■	■	■	■	
20 g		■	■	■	■	■	■	
50 g		■	■	■	■	■	■	
100 g		■	■	■	■		■	
200 g		■	■	■	■		■	
500 g			■	■	■		■	
1 kg			■	■	■			■
2 kg				■	■			■
5 kg					■			■
No. of Weights	12	23	25	27	28	8	12	4
Weights in Plastic Box	30014264 00161707	30014265 00158907	30014266 00158917	30014267 11119980	30014268 11119982	30014269 00158877	30014270 00158887	30014271 11125908



Basic Line

OIML F1, F2 and M1



Proven technology and competitive prices make Basic Line weights a cost effective solution for general testing purposes. All weights are made of stainless steel, even for mg weights no aluminum is used. Weights are manufactured under METTLER TOLEDO's stringent ISO9001 quality management system.

Economical Production



The adjustable cavity (AC) design can be manufactured more economically, making these weights affordable even for smaller budgets.

Clean-room Suitability



All Basic Line weights are protected in robust and easy to clean plastic boxes. FDA approved materials, including foam inserts, make them a perfect solution for regulated industries.



Stainless steel
Density: 7.9 kg/dm³

☐ Weight and Box
☒ Weight and Box, including Certificate



Calibration at ISO 17025:2005
A2LA accredited lab
Worthington, OH

☐ Sheet weight
☒ Marked sheet weight
☒ Cylindrical weight with knob
☒ Marked cylindrical weight with knob

Individual Weights

Nominal value	Shape	F1	F2	M1
		Order number Plastic Box	Order number Plastic Box	Order number Plastic Box
1 mg	<input type="checkbox"/>	11119491 11119561	11119079 11118271	11117935 11117751
2 mg	<input type="checkbox"/>	11119492 11119562	11119080 11118272	11117936 11117752
5 mg	<input type="checkbox"/>	11119493 11119563	11119081 11118273	11117937 11117753
10 mg	<input type="checkbox"/>	11119494 11119564	11119082 11118274	11117938 11117754
20 mg	<input type="checkbox"/>	11119495 11119565	11119083 11118275	11117939 11117755
50 mg	<input type="checkbox"/>	11119496 11119566	11119084 11118276	11117940 11117756
100 mg	<input type="checkbox"/>	11119497 11119567	11119085 11118285	11117941 11117757
200 mg	<input type="checkbox"/>	11119498 11119568	11119086 11118286	11117942 11117758
500 mg	<input type="checkbox"/>	11119499 11119569	11119087 11118287	11117943 11117759
1 g	<input checked="" type="checkbox"/>	11119455 11119525	11119042 11118191	11118055 11117711
2 g	<input checked="" type="checkbox"/>	11119456 11119526	11119043 11118192	11118056 11117712
5 g	<input checked="" type="checkbox"/>	11119457 11119527	11119044 11118193	11118057 11117713
10 g	<input checked="" type="checkbox"/>	11119458 11119528	11119045 11118194	11118058 11117714
20 g	<input checked="" type="checkbox"/>	11119459 11119529	11119046 11118195	11118059 11117715
50 g	<input checked="" type="checkbox"/>	11119460 11119530	11119047 11118196	11118060 11117716
100 g	<input checked="" type="checkbox"/>	11119461 11119531	11119048 11118201	11118061 11117717
200 g	<input checked="" type="checkbox"/>	11119462 11119532	11119049 11118202	11118062 11117718
500 g	<input checked="" type="checkbox"/>	11119463 11119533	11119050 11118203	11118063 11117719
1 kg	<input checked="" type="checkbox"/>	11119464 11119534	11119051 11118204	11118064 11117721
2 kg	<input checked="" type="checkbox"/>	11119465 11119535	11119052 11118205	11118065 11117722
5 kg	<input checked="" type="checkbox"/>	11119466 11119536	11119053 11118206	11118066 11117723
10 kg	<input checked="" type="checkbox"/>	11119467 11119537	11119054 11118211	11118067 11117724
20 kg	<input checked="" type="checkbox"/>	11119468 11119538	11119055 11118212	11118068 11117725

Weight Sets

F1

	1 mg 500 mg	1 mg 200 g	1 mg 1 kg	1 mg 2 kg	1 mg 5 kg	1 g 50 g	1 g 500 g
1 mg	□	□	□	□	□		
2 mg	□ ◻	□ ◻	□ ◻	□ ◻	□ ◻		
5 mg	□	□	□	□	□		
10 mg	□	□	□	□	□		
20 mg	□ ◻	□ ◻	□ ◻	□ ◻	□ ◻		
50 mg	□	□	□	□	□		
100 mg	□	□	□	□	□		
200 mg	□ ◻	□ ◻	□ ◻	□ ◻	□ ◻		
500 mg	□	□	□	□	□		
1 g		■	■	■	■	■	■
2 g		■ ■	■ ■	■ ■	■ ■	■ ■	■ ■
5 g		■	■	■	■	■	■
10 g		■	■	■	■	■	■
20 g		■ ■	■ ■	■ ■	■ ■	■ ■	■ ■
50 g		■	■	■	■	■	■
100 g		■	■	■	■		■
200 g		■ ■	■ ■	■ ■	■ ■		■ ■
500 g			■	■	■		■
1 kg			■	■	■		
2 kg				■ ■	■ ■		
5 kg					■		
No. of Weights	12	23	25	27	28	8	12
Weights in Plastic Box	11119511	11119512	11119513	11119514	11119515	11119516	11119517
	11119581	11119582	11119583	11119584	11119585	11119586	11119587

F2

	1 mg 500 mg	1 mg 200 g	1 mg 1 kg	1 mg 2 kg	1 mg 5 kg	1 g 50 g	1 g 500 g
1 mg	□	□	□	□	□		
2 mg	□ ◻	□ ◻	□ ◻	□ ◻	□ ◻		
5 mg	□	□	□	□	□		
10 mg	□	□	□	□	□		
20 mg	□ ◻	□ ◻	□ ◻	□ ◻	□ ◻		
50 mg	□	□	□	□	□		
100 mg	□	□	□	□	□		
200 mg	□ ◻	□ ◻	□ ◻	□ ◻	□ ◻		
500 mg	□	□	□	□	□		
1 g		■	■	■	■	■	■
2 g		■ ■	■ ■	■ ■	■ ■	■ ■	■ ■
5 g		■	■	■	■	■	■
10 g		■	■	■	■	■	■
20 g		■ ■	■ ■	■ ■	■ ■	■ ■	■ ■
50 g		■	■	■	■	■	■
100 g		■	■	■	■		■
200 g		■ ■	■ ■	■ ■	■ ■		■ ■
500 g			■	■	■		■
1 kg			■	■	■		
2 kg				■ ■	■ ■		
5 kg					■		
No. of Weights	12	23	25	27	28	8	12
Weights in Plastic Box	11118456	11118457	11118458	11118459	11118460	11118461	11118462
	11118339	11118340	11118341	11118342	11118343	11118344	11118345

Weight Sets

M1

	1 mg 500 mg	1 mg 200 g	1 mg 1 kg	1 mg 2 kg	1 mg 5 kg	1 g 50 g	1 g 500 g
1 mg	□	□	□	□	□		
2 mg	□ ◻	□ ◻	□ ◻	□ ◻	□ ◻		
5 mg	□	□	□	□	□		
10 mg	□	□	□	□	□		
20 mg	□ ◻	□ ◻	□ ◻	□ ◻	□ ◻		
50 mg	□	□	□	□	□		
100 mg	□	□	□	□	□		
200 mg	□ ◻	□ ◻	□ ◻	□ ◻	□ ◻		
500 mg	□	□	□	□	□		
1 g		■	■	■	■	■	■
2 g		■ ■	■ ■	■ ■	■ ■	■ ■	■ ■
5 g		■	■	■	■	■	■
10 g		■	■	■	■	■	■
20 g		■ ■	■ ■	■ ■	■ ■	■ ■	■ ■
50 g		■	■	■	■	■	■
100 g		■	■	■	■		■
200 g		■ ■	■ ■	■ ■	■ ■		■ ■
500 g			■	■	■		■
1 kg			■	■	■		
2 kg				■ ■	■ ■		
5 kg					■		
No. of Weights	12	23	25	27	28	8	12
Weights in Plastic Box	11117862	11117863	11117864	11117865	11117866	11117867	11117868
	11117771	11117772	11117773	11117774	11117775	11117776	11117777

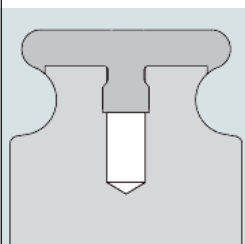
ASTM Weights

Classes 1–4



Low magnetic permeability and high corrosion resistance ensure reliable values. All weights are made of stainless steel, even for mg weights no aluminum is used. Weights are manufactured under METTLER TOLEDO's stringent ISO9001 quality management system.

Unique Design



METTLER TOLEDO ASTM knob weights are designed to resist dust and moisture intrusion offering long term stability.

High Gloss Polish



Experience combined with special skill acquired through years of weight polishing guarantee the consistent high quality our customers demand.

Stainless steel
Density: 7.9 kg/dm³



Weight and Box



Weight and Box,
including Certificate



Calibration at ISO 17025:2005
A2LA accredited lab
Worthington, OH



Sheet weight



Marked sheet weight



Cylindrical weight with knob



Marked cylindrical
weight with knob

Individual Weights

Nominal value	Shape	Class 1		Class 2		Class 3		Class 4	
		Order number Weight in Plastic box		Order number Weight in Plastic box		Order number Weight in Plastic box		Order number Weight in Plastic box	
1 mg	□	11123446	11123469	11123492	11123515	11123538	11123561	11123584	11123607
2 mg	□	11123447	11123470	11123493	11123516	11123539	11123562	11123585	11123608
5 mg	□	11123448	11123471	11123494	11123517	11123540	11123563	11123586	11123609
10 mg	□	11123449	11123472	11123495	11123518	11123541	11123564	11123587	11123610
20 mg	□	11123450	11123473	11123496	11123519	11123542	11123565	11123588	11123611
50 mg	□	11123451	11123474	11123497	11123520	11123543	11123566	11123589	11123612
100 mg	□	11123452	11123475	11123498	11123521	11123544	11123567	11123590	11123613
200 mg	□	11123453	11123476	11123499	11123522	11123545	11123568	11123591	11123614
500 mg	□	11123454	11123477	11123500	11123523	11123546	11123569	11123592	11123615
1 g	■	11123455	11123478	11123501	11123524	11123547	11123570	11123593	11123616
2 g	■	11123456	11123479	11123502	11123525	11123548	11123571	11123594	11123617
5 g	■	11123457	11123480	11123503	11123526	11123549	11123572	11123595	11123618
10 g	■	11123458	11123481	11123504	11123527	11123550	11123573	11123596	11123619
20 g	■	11123459	11123482	11123505	11123528	11123551	11123574	11123597	11123620
50 g	■	11123460	11123483	11123506	11123529	11123552	11123575	11123598	11123621
100 g	■	11123461	11123484	11123507	11123530	11123553	11123576	11123599	11123622
200 g	■	11123462	11123485	11123508	11123531	11123554	11123577	11123600	11123623
500 g	■	11123463	11123486	11123509	11123532	11123555	11123578	11123601	11123624
1 kg	■	11123464	11123487	11123510	11123533	11123556	11123579	11123602	11123625
2 kg	■	11123465	11123488	11123511	11123534	11123557	11123580	11123603	11123626
5 kg	■	11123466	11123489	11123512	11123535	11123558	11123581	11123604	11123627
10 kg	■	11123467	11123490	11123513	11123536	11123559	11123582	11123605	11123628
20 kg	■	11123468	11123491	11123514	11123537	11123560	11123583	11123606	11123629

Weight Sets



Refer to page 26




	1 mg 500 mg	1 mg 100 g	1 mg 200 g	1 mg 500 g	1 mg 1 kg	1 mg 2 kg	1 mg 5 kg	10 mg 50 g	1 mg 50 mg	1 g 100 g	1 g 500 g
1 mg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2 mg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5 mg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
10 mg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
20 mg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
50 mg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
100 mg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
200 mg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
500 mg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1 g		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2 g		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5 g		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10 g		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
20 g		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
50 g		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
100 g		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
200 g			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
500 g				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
1 kg					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
2 kg						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
5 kg							<input checked="" type="checkbox"/>				
Number of Weights	12	21	23	24	25	27	28	16	8	9	12

Class 1	Weights in Plastic Box	11124000	11124002	11124004	11124006	11124008	11124010	11124012	11124014	11124016	11124018	11124020
		11124001	11124003	11124005	11124007	11124009	11124011	11124013	11124015	11124017	11124019	11124021
Class 2	Weights in Plastic Box	11124022	11124024	11124026	11124028	11124030	11124032	11124034	11124036	11124038	11124040	11124042
		11124023	11124025	11124027	11124029	11124031	11124033	11124035	11124037	11124039	11124041	11124043
Class 3	Weights in Plastic Box	11124044	11124046	11124048	11124050	11124052	11124054	11124056	11124058	11124060	11124062	11124064
		11124045	11124047	11124049	11124051	11124053	11124055	11124057	11124059	11124061	11124063	11124065
Class 4	Weights in Plastic Box	11124066	11124068	11124070	11124072	11124074	11124076	11124078	11124080	11124082	11124084	11124086
		11124067	11124069	11124071	11124073	11124075	11124077	11124079	11124081	11124083	11124085	11124087

Tips on calibration and re-calibration of weights

- Calibration laboratories can be accredited in one or more fields of calibration, e.g., dimensional, thermodynamic or mechanical. Ensure that your calibration laboratory is accredited in accordance to ISO/IEC 17025 for mass calibration.
- Customers often trust their weights to legal verification officers. As this service falls under laws of legal metrology, no actual calibration is performed but only verification of weights. Legal verification is not performed in accordance with ISO/IEC 17025, and therefore such weights are not suitable for routine testing of balances.
- Legally verified weights are explicitly applied to test scales used for commercial trade between seller and customer, e.g., butchery.

Industrial Weights

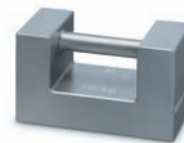
	Weight
	Weight, including Certificate
 Calibration at ISO 17025:2005 A2LA accredited lab Worthington, OH	

Grip Handle Weights

Stainless steel,
High gloss finish
Density: 7.9 kg/dm³



Stainless steel, Glass
bead blasted, passivated
Density: 7.9 kg/dm³



Nominal value	OIML F1		OIML M1	
	Order number		Order number	
1 kg	11125424	11125429	30013625	30024245
2 kg	11125425	11125430	30013626	30024246
5 kg	11125426	11125431	30006805	30024247
10 kg	11125427	11125432	30006806	30024248
20 kg	11125428	11125433	30006807	30024249

Grip Handle Weights Metric

Stainless steel
Density: 7.9 kg/dm³



Nominal value	OIML F2		OIML M1	
	Order number		Order number	
5 kg	30013657	11116656	30013652	11116601
10 kg	30013658	11116657	30013653	11116611
20 kg	30013659	11116658	30013654	11116621
50 kg	30013660	11116659	30013655	11116631
40 kg weight carrier	30013661	11116660	30013656	11116641

Grip Handle Weights Metric

Cast iron
Two-component coating
Density: 7.2 kg/dm³



Nominal value	OIML M1		OIML M2		OIML M3	
	Order number		Order number		Order number	
5 kg	11125400	11125404	11125408	11125412	11125416	11125420
10 kg	11125401	11125405	11125409	11125413	11125417	11125421
20 kg	11125402	11125406	11125410	11125414	11125418	11125422
50 kg	11125403	11125407	11125411	11125415	11125419	11125423

Heavy Capacity Weights Avoirdupois

Cast iron
Painted
Density: 7.2 kg/dm³

NIST F

Nominal value	Order number	
20 lb	11125620	11125653
25 lb	11125621	11125654
50 lb	11125622	11125655
500 lb	11125626	11125659
1000 lb	11125627	11125660



Heavy Capacity Weights Metric

Cast iron
Two-component coating
Density: 7.2 kg/dm³

OIML M1

Nominal value	Order number
50 kg	11125498
100 kg	11125500
200 kg	11125501
500 kg	11125502
1000 kg	11125503
2000 kg	11125504
5000 kg	11125505



Tweezers



	Order number
Straight tips, for weights 1 mg – 20 g, length 115 mm	00015900
Straight tips, for weights 1 mg – 20 g, length 220 mm	11116544
Straight tips, for weights 20 mg – 200 g, length 140 mm	11116543
Bent tips, for weights 20 g – 200 g, length 200 mm	00015901
Bent tips, for weights 1 mg – 200 g, length 130 mm	11116540

Weight Handles



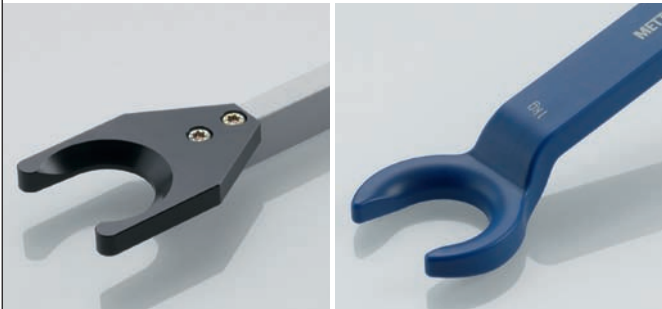
	Order number
Steel, with rubber coating, for 2 kg weights	11123096
Steel, with rubber coating, for 5 kg weights	11123097
Aluminum, for 10 kg and 20 kg weights	00015904
Aluminum, for 10 kg and 20 kg weights, with ear for crane	11116517
Aluminum, for 50 kg weights, with ear for crane	11116515



Nylon gloves

Accessories

Weight Forks



	Order number
Aluminum/Polyamide, for weights 500 g – 1 kg, length 300 mm	00222175
Aluminum/Polyamide, for 2 kg weights, length 320 mm	00015902
Aluminum/Polyamide, for 5 kg weights, length 470 mm	00015903
ABS, for 500 g weights, length 150 mm	11123094
ABS, for 1 kg weights, length 150 mm	11123095

Miscellaneous Accessories



Brush

Weight marking

	Order number
Leather gloves, pair, not suitable for regulated environments	00072001
Nylon gloves, pair, suitable for all environments	11123098
Micro fibre cloth, suitable for all environments	00158798
Brush, suitable for all environments	00158799
Weight marking, up to 5 digits, alphanumeric, on 1 g – 50 kg weights	11116500
Air bellow, for weight cleaning	11116548

NoWait Weights

Waiting can be frustrating! Let METTLER TOLEDO eliminate the frustration with our NoWaitWeights and Weight Calibration*.

Our most common Carepacs and weights are guaranteed to be in stock or the next calibration is free! Plus, your existing weights can be re-calibrated in as little as ten business days or the next calibration is free!



Look For the NoWaitWeights Logo!

The NoWaitWeights logo can be found on our eStore to help you select weights that are guaranteed to be in stock.

The METTLER TOLEDO eStore makes it easy to order online! Go to www.mt.com/estore to start shopping now!

www.mt.com/na-nowait

* Re-calibration applies to 1mg – 1kg weights. Our 10-day calibration offer begins upon receipt of your weight(s) and must include a copy of the most recent calibration certificate and a correct, signed weight re-calibration request form (available on-line at www.mt.com/na-nowait). Program is subject to change without notice. Quantities are limited.



METTLER TOLEDO weights are setting new standards

From sourcing steel of finest quality to calibration of final weights using our own mass comparators, each manufacturing step is as innovative as innovation can be. Melting of steel under vacuum, electrolytic polishing, or calibrations performed by latest generation robots – each production step impacts the quality of the final weight.

Online Weight Selector

Enter this website address for access: www.mt.com/weights
and click on the banner shown below.



Weight selector for laboratory balances

Nominal value and class of weights recommended by this weight selector are calculated to test balances with assigned process tolerances of up to 0.03%.

[► Start Search](#)

Routine testing of your balance's accuracy is at the heart of most quality systems

The METTLER TOLEDO Weight Selector will recommend two appropriate weights for performing routine testing. Simply enter the model of your METTLER TOLEDO balance, or, for older METTLER TOLEDO models or other brands enter the maximum capacity of the balance. The Weight Selector will recommend weights tailored to the characteristics of your balance with the following benefits:

- Cost savings – purchase only what you need for routine testing, two weights rather than entire weight set
- Low cost of ownership – recalibration costs lower for two weights vs. entire set
- Time savings – easy and quick to use testing approach supported by manufacturer SOPs
- Testing against process tolerances as low as 0.03%

U.S.A. **Mettler-Toledo, Inc.**
Columbus, OH 43240
Tel. 800-METTLER
Fax (614) 438 4900

Canada **Mettler-Toledo Inc.**
Ontario, Canada
Tel (800) 638-8537
Fax (905) 681-8036

For all other countries **Mettler-Toledo AG**
PO Box VI-400, CH-8606 Greifensee
Tel. +41-44-944 22 11, Fax +41-44-944 31 70

Subject to technical changes
© 11/2011 Mettler-Toledo AG
Printed in Switzerland 11796035

www.mt.com

For more information



Quality certificates
Development, production and
testing under ISO 9001.



Environment management system
under ISO 14001.



"Communauté Européenne"
This mark assures you that our
products comply with the latest
guidelines.