

OIML and ASTM Weights



Comprehensive Portfolio

- WeightLink™
- CarePacs®
- Signature Line E1, E2, F1
- Standard Line E2, F1
- Basic Line F1, F2, M1
- ASTM Classes 1 – 4
- Industrial Weights F1 – M3
- Accessories

Expertly Crafted Weights
for Consistent Performance

METTLER **TOLEDO**

Unrivaled Expertise

Brought to You With Passion

METTLER TOLEDO's world leading expertise in metrology extends to weights, weight sets and weight calibration services. The weight portfolio covers ANSI/ASTM and OIML weights from fifty micrograms to five tons in all accuracy classes. Our weights are used all over the world, not only for testing balances but also 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.	Weight Calibration Service  Description of calibration service for weights.	8
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10

Weight Verification System

How to guarantee fully traceable balance testing with WeightLink™.

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.

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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 the highest quality – even 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.



Polishing is an industrial art

Experience and specialist skills acquired through years' of weight polishing guarantee the consistent high quality our customers demand.

OIML Weights



Weights are available in OIML classes E1, E2, F1, F2, M1, M2 and M3 matching all requirements of OIML R111. Nominal values range from 50 µg to 5 tons, satisfying all industry and customer specific needs.

ANSI/ASTM Weights



ASTM weights are available in classes 1 – 4 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. In addition, METTLER TOLEDO's WeightLink™ system guarantees fully traceable balance testing.

Weight Boxes



Traditional wooden boxes are still preferred in many mass labs while plastic and aluminum boxes better serve regulated and other industries. Impact resistant 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 weight calibration laboratories, in Switzerland and other key markets, guarantee a fast and cost effective calibration service regardless of where you are based.

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.

Weight Calibration

the Cornerstone for Secure Testing

Accurately calibrated weights are the basis of accurate weighing results. Balances should always be checked with reference weights you can rely on and trust. At our accredited mass laboratories, we clean, 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.



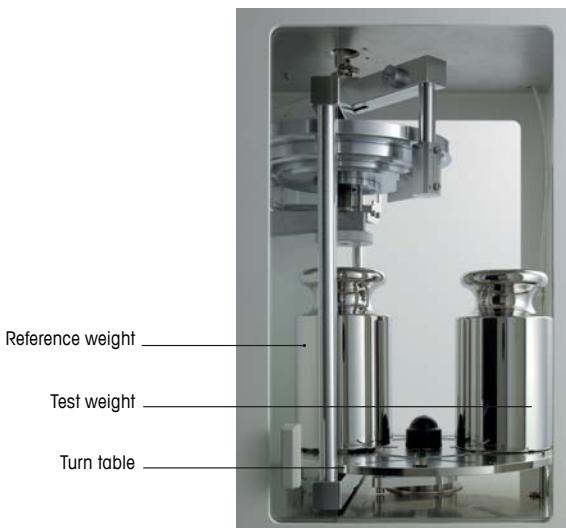
Unique weight adjustment procedure

Electrolytic adjustment of weights is a unique technique of METTLER TOLEDO to achieve surface smoothness which far exceeds 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 cleaning or 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

* Offering may vary from country to country



Feature

Benefit

Accredited Mass Laboratory	Accreditation in accordance with ISO/IEC 17025 ensures independent auditing of a labs technical competence
Weight cleaning	Each weight is returned to its original state to ensure the same conditions for every balance test
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 weight calibration 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.



A certificate is provided with all the calibration results. With WeightLink™, calibration results are also stored in a data matrix code (eData).

Professional CarePacs® for Smooth Routine Testing

Test your balances securely, and in accordance with USP <41>, by using just two weights to test at 5% and 100% of the capacity of each balance. Not only is this unique approach much faster, but purchasing and recalibration costs are substantially reduced. 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.



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.



WeightLink™ Ensures Full Traceability

This unique weight identification system works with the balance firmware to cross-check the weight against its calibration certificate, making it impossible to test using the wrong weight. With weight parameters transferred electronically to the balance, the system guarantees full traceability. See page 10.



CarePac® Small



Save Time and Money

Routine testing is performed with just two weights corresponding to the maximum and minimum loads. Weights are specified to validate process tolerances up to 0.03%.

Customer-specific 3rd Weight

CarePacs® offer the option to add a third weight to accommodate individual testing requirements, e.g. minimum weight determination.

Security through Superior Accessories

Ergonomic tweezers (or weight forks for larger weights) as well as clean-room approved gloves and cleaning cloths meet the highest industry requirements and assure professional testing.

CarePac® Sizes

Balance Max. Load

Small

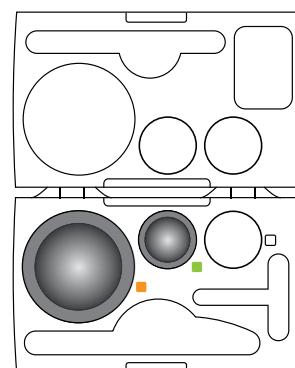
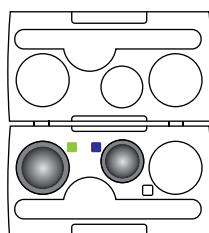
Up to 490 g

Medium

From 500 g to 4900 g

Large

From 5 kg to 8 kg



For more information:

▶ www.mt.com/carepacs

Weight Verification System for Traceable Balance Testing

In our innovative WeightLink™ system, every test weight has a unique identification number (UIN) on the base which links it to its calibration certificate. Calibration and certificate data are stored in a data matrix code (DMC). The dedicated DMC Scanner reads the two codes and sends the information to the balance. The balance firmware validates the certificate and weight data before allowing the balance test to begin.

With this highly efficient system, it is impossible to test using the wrong weight and the risk of errors from manual data entry is completely eliminated. Full traceability is assured in 4 easy steps:

- Scan certificate data
- Scan weight
- Perform balance test
- Print report

Proven Traceability



The built-in balance testing application records the weight-specific data and the test results. A detailed test report can be printed out with an external printer to provide full documentation of the performed balance test.

Enhanced Security



WeightLink™ will only allow the use of a valid test weight. Verification of the test weight prior to use means you can rest assured that your testing procedures are fully compliant.

Improved Productivity



Automatic data transfer of weight parameters into the balance firmware is much faster than manual data entry and removes the need to check and re-check handwritten entries. Printing out results is quick and easy.



Easy Setup

WeightLink™ weights are available from 1 g to 5 kg and the data matrix scanner simply plugs into the back of your balance. Your local METTLER TOLEDO representative can advise you on compatible balance firmware versions.

► www.mt.com/weights

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.

Calibration Cycle	Type of Weight	Material	Location	
25 years	International Prototype 1 kg	Platinum Iridium $\rho = 21.5 \text{ g/cm}^3$	BIPM, Sèvres, France	France
10 years	National Prototype 1 kg	Platinum Iridium $\rho = 21.5 \text{ g/cm}^3$	CH, F, UK, USA, ... e.g. METAS, Berne, Switzerland	India
5 years	Primary Standard 1 kg	Stainless Steel $\rho = 8.0 \text{ g/cm}^3$	CH, F, UK, USA, ... e.g. METAS, Berne, Switzerland	Italy
1-2 years	Primary Standard METTLER TOLEDO Mass Standard Lab	Stainless Steel $\rho = 8.0 \text{ g/cm}^3$	13 countries	Japan
	Customer	Stainless Steel Brass, Aluminum	Worldwide	Netherlands
				Mexico
				Singapore
				Spain
				Sweden
				Switzerland
				Thailand
				UK
				USA

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		

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	...



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.

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

Order Numbers



15

CarePacs® and WeightLink™ CarePacs®

For balances with max. load of 8 kg



16

Signature Line Weights and WeightLink™ Calibration 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

25

Accessories

For professional weight handling

Color Code

ASTM

0
1
2
3
4
5
6
7

For tolerances refer to page 13

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

weights@mt.com

CarePac® S

Weighing ranges
up to 490 g

Balances		XPE205DR	XP105	XSE105DU				
OIML		XPE204	XP105	XSE104				
		XP205	XS105					
		XP205S	ML304T	XS104				
		XP204S	MS205T	XAI05				
		XP203S	MS304TS	MS105T	XP56			
		XSE204	MS204TS	MS104TS	XS64			
		XP404S	XS205	ML204T	ML54T			
		XS403S	XS204	ML203T	HSI53	HE73	XPR6	XPR2
		MS403TS	HX204	ML303T	HC103	HE53	XP26	XS3
Nominal weight and class		200 g F2	200 g F2	100 g F2	50 g F2	20 g F1	5 g E2	2 g E2
		20 g F1	10 g F1	5 g E2	2 g E2	1 g E2	0.2 g E2	0.1 g E2
CarePac® S		11123000	11123001	11123002	11123003	11123006	11123005	11123004
WeightLink™ CarePac® S		30293475	30293476	30293477	30293478	30293481	30293480	30293479

ASTM

Nominal weight and class	200 g 1	200 g 1	100 g 1	50 g 1	50 g 1	5 g 1	2 g 1
	20 g 1	10 g 1	5 g 1	2 g 1	1 g 1	0.2 g 1	0.1 g 1
CarePac® S	11123100	11123101	11123102	11123103	11123106	11123105	11123104
WeightLink™ CarePac® S	30293463	30293464	30293465	30293466	30293469	30293468	30293467

CarePac® M

Weighing ranges
500 g – 4900 g

Balances		XPE504	XP504	XP603S	MS603TS	XP1203S	MS1003TS	XP2003S	XP2002S	MS3002TS	MS4002TS	MS4002TSDR	XP5003S	XP8002S	XP6002S	XP4001S	XP4002S	XS4002S	XS4001S	MS6002TS	MS8001TS	XS8001S	XP8001S	XP6001S	XP6001S	MS6002TS	XS5003S	MS8001TS	XS6002S	ML6001T				
OIML																																		
Nominal weight and class		500 g F2		1000 g F2		2000 g F2		2000 g F2		2000 g F2		2000 g F2		5000 g F2		200 g F2		100 g F2		200 g F2		100 g F2		200 g F2		100 g F2		200 g F2		100 g F2				
		20 g F1		50 g F2		100 g F2		100 g F2		100 g F2		100 g F2		5000 g F2		200 g F2		100 g F2		200 g F2		100 g F2		200 g F2		100 g F2		200 g F2		100 g F2				
CarePac® M / L		11123007		11123008		11123009		11123009		11123010		11123010		11123011		11123111		30293482		30293483		30293484		30293485		30293486		30293487		30293488				
WeightLink™ CarePac® M / L		30293470		30293471		30293472		30293472		30293473		30293473		30293474																				
ASTM																																		
Nominal weight and class		500 g 1		1000 g 1		2000 g 1		2000 g 1		2000 g 4		5000 g 4					20 g 1		50 g 1		100 g 1		200 g 4		5000 g 4		200 g 4		100 g 1		200 g 4		100 g 1	
		20 g 1		50 g 1		100 g 1		200 g 4		200 g 4		200 g 4		11123111		11123111		30293470		30293471		30293472		30293473		30293474								
CarePac® M / L		11123107		11123108		11123109		11123109		11123110		11123110		11123111		11123111		30293470		30293471		30293472		30293473		30293474								
WeightLink™ CarePac® M / L		30293470		30293471		30293472		30293472		30293473		30293473		30293474																				

3rd Weight for customized testing

Value		WeightLink™		WeightLink™		
Value	OIML Class E2	OIML Class E2	OIML Class E2	ASTM Class 1	ASTM Class 1	
1 mg	11123044	1 g	11123053	30293554	11123153	30293487
2 mg	11123045	2 g	11123054	30293555	11123154	30293488
5 mg	11123046	5 g	11123055	30293556	11123155	30293489
10 mg	11123047	10 g	11123056	30293557	11123156	30293490
20 mg	11123048	20 g	11123057	30293558	11123156	30293491
50 mg	11123049	50 g	11123058	30293559	11123158	30293492
100 mg	11123050	100 g	11123059	30293560	11123159	30293493
200 mg	11123051					
500 mg	11123052					

Data Matrix Code Scanner

WeightLink™	
DMC Scanner	30268560
WeightLink™	30304696
DMC Scanner + RS232 option	



* Please visit our website to see the full range of CarePacs® available.

▶ www.mt.com/carepacs

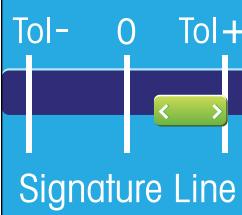
Signature Line

OIML E1, E2 and F1



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

Guaranteed Positive Tolerances



The unique electrolytic adjustment procedure combined with robotic calibrations allows selective production of weights in the positive tolerance range.

Full Lifetime Guarantee

- Quality
- Accuracy
- Service
- 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



WeightLink™ weight, including Certificate and eData



Wire weight



Marked wire weight



Cylindrical weight with knob



Marked cylindrical weight with knob

Individual Weights

Nominal value	Shape	E1	E2	
		Order number Wooden Box	Order number Plastic Box	Order number WeightLink™
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	30293502
2 g	■	00159100	00159101	30293503
5 g	■	00159110	00159111	30293504
10 g	■	00159120	00159121	30293505
20 g	■	00159130	00159131	30293506
50 g	■	00159140	00159141	30293507
100 g	■	00159150	00159151	30293508
200 g	■	00159160	00159161	30293509
500 g	■	00159170	00159171	30293550
1 kg	■	00159180	00159181	30293551
2 kg	■	00159190	00159191	30293552
5 kg	■	00159200	00159201	30293553
10 kg	■	00159210	00159211	30003729
20 kg	■	00159220	00159221	30003730
50 kg	■	00159230	00159231	30003731

Individual Weights

Nominal value	Shape	F1	
		Order number Plastic Box	Order number WeightLink™
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	30293561
2 g	■	30003753	30293562
5 g	■	30003754	30293563
10 g	■	30003755	30293564
20 g	■	30003756	30293565
50 g	■	30003757	30293566
100 g	■	30003758	30293567
200 g	■	30003759	30293568
500 g	■	30003760	30293569
1 kg	■	30003761	30293570
2 kg	■	30003762	30293571
5 kg	■	30003763	30293572
10 kg	■	30003764	—
20 kg	■	30003765	—
50 kg	■	30003766	—

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	
Wooden Box	00159300	00159340	00159350	11117614	11117616	00159310	00159320	00159360	00159330									
	00159301	00159341	00159351	11117615	11117617	00159311	00159321	00159361	00159331									
										-	-	-	-	-	-	-	-	
										Aluminum 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
Aluminum Box	-	-	-	-	-	-	-	-
	30003767	30003768	30003769	30003770	30003771	30003772	30003773	30003774

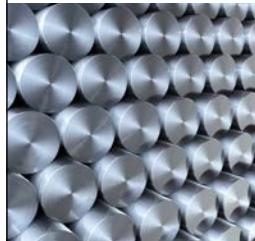
Standard Line

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 11125906	



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 ISO 9001 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
2 mg	<input type="checkbox"/>	11119492	11119562	11119080
5 mg	<input type="checkbox"/>	11119493	11119563	11119081
10 mg	<input type="checkbox"/>	11119494	11119564	11119082
20 mg	<input type="checkbox"/>	11119495	11119565	11119083
50 mg	<input type="checkbox"/>	11119496	11119566	11119084
100 mg	<input type="checkbox"/>	11119497	11119567	11119085
200 mg	<input type="checkbox"/>	11119498	11119568	11119086
500 mg	<input type="checkbox"/>	11119499	11119569	11119087
1 g	<input checked="" type="checkbox"/>	11119455	11119525	11119042
2 g	<input checked="" type="checkbox"/>	11119456	11119526	11119043
5 g	<input checked="" type="checkbox"/>	11119457	11119527	11119044
10 g	<input checked="" type="checkbox"/>	11119458	11119528	11119045
20 g	<input checked="" type="checkbox"/>	11119459	11119529	11119046
50 g	<input checked="" type="checkbox"/>	11119460	11119530	11119047
100 g	<input checked="" type="checkbox"/>	11119461	11119531	11119048
200 g	<input checked="" type="checkbox"/>	11119462	11119532	11119049
500 g	<input checked="" type="checkbox"/>	11119463	11119533	11119050
1 kg	<input checked="" type="checkbox"/>	11119464	11119534	11119051
2 kg	<input checked="" type="checkbox"/>	11119465	11119535	11119052
5 kg	<input checked="" type="checkbox"/>	11119466	11119536	11119053
10 kg	<input checked="" type="checkbox"/>	11119467	11119537	11119054
20 kg	<input checked="" type="checkbox"/>	11119468	11119538	11119055
				11118204
				11118205
				11118206
				11118207
				11118208
				11118209
				11118210
				11118211
				11118212
				11118213
				11118214
				11118215
				11118216
				11118217
				11118218
				11118219
				11118220
				11118221
				11118222
				11118223
				11118224
				11118225

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	
Plastic Box	11119511	11119512	11119513	11119514	11119515	11119516	11119517	
	11119581	11119582	11119583	11119584	11119585	11119586	11119587	

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
□	□	□	□	□		
□ □	□ □	□ □	□ □	□ □		
□	□	□	□	□		
□	□	□	□	□		
□ □	□ □	□ □	□ □	□ □		
□	□	□	□	□		
□	□	□	□	□		
□ □	□ □	□ □	□ □	□ □		
□	□	□	□	□		
□	□	□	□	□		
□ □	□ □	□ □	□ □	□ □		
□	□	□	□	□		
	■ ■	■ ■	■ ■	■ ■	■ ■	■ ■
	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■
	■ ■	■ ■	■ ■	■ ■	■ ■	■ ■
	■ ■	■ ■	■ ■	■ ■	■ ■	■ ■
	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■
	■ ■	■ ■	■ ■	■ ■	■ ■	■ ■
	■ ■	■ ■	■ ■	■ ■		
	■ ■	■ ■	■ ■	■ ■		
	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■		
		■ ■	■ ■	■ ■		
		■ ■	■ ■	■ ■		
			■ ■ ■ ■	■ ■ ■ ■		
				■ ■ ■ ■		
12	23	25	27	28	8	12
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	
Plastic Box	11117862	11117863	11117864	11117865	11117866	11117867	11117868	
	11117771	11117772	11117773	11117774	11117775	11117776	11117777	

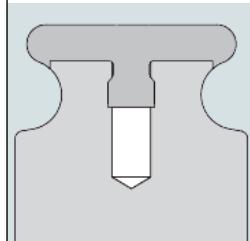
ASTM Weights

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



Refer to page 26

Weight Sets



	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	□	□	□	□	□	□	□		□		
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							■ ■ ■ ■ ■ ■ ■ ■				

	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
Density: 7.9 kg/dm³



OIML F2	OIML M1
---------	---------

Nominal value	Order number	Order number
5 kg	30013657	11116656
10 kg	30013658	11116657
20 kg	30013659	11116658
50 kg	30013660	11116659
40 kg weight carrier	30013661	11116660
	30013656	11116641



Weight carrier

720 x 275 x 330 mm (LxWxH)
Weight carriers are available for easy and fast calibration up to 200 kg.
Weight carriers can accommodate 8 pieces 20 kg, 10 kg or 5 kg.
The weights can be easily stacked for the calibration of high-load balances.



Grip Handle Weights

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



F1

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



M1

Nominal value	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

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



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

Heavy Capacity Weights

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



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
	11125499*
	11125506*
	11125507*
	11125508*
	11125509*
	11125510*
	11125511*

*COFRAC certificate, LNE approval no J060982-01-1/1

For quotes, technical information or other weights

weights@mt.com

Accessories



Tweezers

Order No.

Straight tips, for weights 1 mg – 50 g, length 130 mm	00015900
Straight tips, for weights 1 g - 1 kg, length 220 mm	11116544
Straight tips, for weights 1 mg – 50 g, length 140 mm	11116543
Bent tips, for weights 1 g – 1 kg, length 210 mm	00015901
Bent tips, for weights 1 g – 200 g, length 130 mm	11116540
Straight tips, for weights 1 mg – 500 mg, length 130 mm	30040321



Weight Forks

Order No.

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



Weight Handles

Order No.

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

Miscellaneous Accessories



DMC Scanner



Brush



Weight marking

Order No.

Leather gloves, pair, not suitable for regulated environments	00072001
Nylon gloves, pair, suitable for all environments	111123098
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
WeightLink™ DMC Scanner	30268560
WeightLink™ DMC Scanner + RS232 option	30304696

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!
To start shopping now – go to:

▶ www.mt.com/estore

* Re-calibration applies to 1 mg – 1 kg 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.

► www.mt.com/na-nowait

Our Weights Competence Ensures Your Quality

Routine testing of your balances sets the foundation for the accurate weighing results upon which your product quality depends. With years of metrology know-how and manufacturing expertise, you can rely on METTLER TOLEDO's weights and weight calibration services to support your daily weighing activities.



Test with just two weights

The unique CarePacs® approach to balance testing uses just two test weights corresponding to 5% and 100% of the capacity of your balance. You save time and costs.



Guaranteed traceability

The WeightLink™ system will only allow the use of a valid test weight. Verification of the test weight prior to use means you can rest assured that your testing procedures are fully compliant.



Trusted calibration

Our global network of accredited mass calibration laboratories meet or exceed ISO/IEC 17025, FDA and GMP standards. Weight calibration is the only way to obtain accurate and reliable data.

www.mt.com/weights

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