

Classic Balances



NewClassic MS

Precise results

Easy cleaning

Designed to last



Immediate Results – Lasting Value

Swiss Weighing

METTLER TOLEDO

Ensuring Lasting Value Balances With Swiss Technology

At METTLER TOLEDO, we strive to provide reliable precision instruments for our customers across industries. With precise results, easy cleaning and a design made to last, NewClassic balances help you deal with many business challenges, from boosting productivity, achieving high quality to serving heightened customer demands.

Swiss technology combined with Swiss precision and quality assist you in creating lasting value for your business.

Unlimited possibilities

With their wide range of applications, the NewClassic balances are a perfect choice for every weighing situation: in laboratories, light industry production, training facilities, warehouses, and many more. Discover for yourself the unlimited possibilities, using Formulation, Statistics, Check Weighing, Piece Counting and all the other applications now available in NewClassic balances.



Reference control
Conveniently monitor deviations from the reference weight



Inventory
Determine quickly article quantities based on piece counting



Quality control
Carry out random quality checks on receipt of goods



Process control
Reliably control fill quantities and net weight settings



Formulation
Guarantee that ingredients are dosed and mixed in accordance with the recipe



Create lasting value for your
business with NewClassic

Precise Results With the NewClassic MS

Whether you are carrying out a simple routine task or a complicated weighing procedure, NewClassic balances will impress you with their excellent performance, delivering accurate results within the shortest possible time, thanks to MonoBloc and FACT. The proven MonoBloc weighing technology guarantees long operation life and extreme ruggedness, while FACT automatically adjusts the balances using internal weights, whenever changes in temperature affect the

accuracy of your weighing results. For added security, you can configure FACT to initiate self-calibration at specific times. Further guarantee for precision is given by the leveling of the balance: the adjustable feet and level indicator are now placed in front of the balance, for easy access and good visibility. Leaving you to concentrate on more important tasks, safe in the knowledge that your results will be precise.

Your benefits



Error-free reading

Read the large brilliant numbers from the clear High Contrast Display (HCD) without any difficulties, even from a distance or at an awkward angle.



Once level, always level

Fixable rear support **LevelLock** feet offer extra stabilizing safety, so the balance cannot tilt over under eccentric loads.



Electromagnetic compatibility

The unique metal housing considerably reduces the effects of thunderstorms or electromagnetic interference from other equipment that may affect the weighing results.



Just like Swiss timepieces, METTLER TOLEDO balances have become synonymous with reliability, accuracy and durability throughout the world. We are proud of our NewClassic balances, built on the longstanding tradition and experience of pioneer and global market leader, METTLER TOLEDO.

Precision has a name: NewClassic

Easy Cleaning for Clear Results

Focus on more important tasks, minimizing the number of secondary operations, such as cleaning the balance or the glasses of the draft shield. With NewClassic balances, you can dismantle the complete draft shield or just the glasses in a few quick steps, without tools and without moving the balance. The streamlined, ridge-free design of the NewClassic balances facili-

tates cleaning, offering a solution that is both practical and attractive. The robust construction of the NewClassic balances makes them water- and dust-tight (IP54-in-use and IP65, depending on the model). As the housing is resistant to most chemicals, incl. acetone, you don't have to worry about using the most common cleaning agents.

Your benefits



Quick to dismantle

Remove, clean and put back all of the **QuickLock** draft shield glass panels in just a few simple steps, without tools and without moving the balance.



Dishwasher-safe

Wash the glass panels of the draft shield easily and conveniently in the dishwasher.



Chemical-Resistant

The housing of the NewClassic balance is resistant to most chemicals, incl. acetone. The protective cover, supplied as standard, offers protection against stains and scratches.



Beautiful objects are often extremely difficult to clean. Not so with the NewClassic balance. All it takes is 20 seconds to remove the glass panels, and a further 10 seconds to completely dismantle the draft shield. Why not try it for yourself?

Dismantled in just a few steps, entirely without tools

Designed to Last and to Pay Off

Purchasing a balance is an investment for years. It has to offer years of reliable service to ensure optimum return on investment. One crucial factor in the equation is robustness: With NewClassic balances, the high quality aluminum die-cast housing protects the internal weighing cell from environmental influences and impacts.

Stable sensor keys guarantee easy operation, while overload protection protects both the weighing cell and the whole balance against excess weight overload. NewClassic balances guarantee excellent weighing performance, both in the laboratory and in harsh industrial environments.

Your benefits



Durable and robust

The metal housing protects the weighing sensor from environmental influences and impacts. For guaranteed consistency and precision year after year – even with intensive use in harsh environments.



MonoBloc inside

The proven high-performance weighing cell MonoBloc guarantees long service life and extreme ruggedness.



Timeless Design

NewClassic balances offer impressive performance, with a timeless design. Good design speaks for itself.



Rock crystal is proof that a product of extraordinary strength and a wide range of applications can also be beautiful and aesthetically perfect. Likewise, the NewClassic balance combines beauty and robustness in one durable design.

Stylish combination of robust and attractive design

Personalize Your Balance For Higher Productivity

Achieving higher productivity, without compromising on quality will enable you to deal with your daily business challenges, such as ever shorter timescales, quality assurance, regular audits, data management or ensuring the optimal performance of your equipment. With NewClassic balances you achieve higher productivity, because our balances can be programmed according to the individual needs of the person operating the balance:

- Operate the balance in your own language
 - Use the pre-programmed applications and get your results quickly and efficiently
 - Work GxP-conform with the built-in Time and Date function
 - Profit from the possible connections, such as USB or RS, and manage and store your weighing data conveniently on your PC.
- Introduce higher productivity and convenience into the workplace with NewClassic balances.



Languages
Bonjour, Welcome, Guten Tag!
 Operate the balance in your own language: NewClassic balances are able to “speak” a range of different languages: English, German, French, Italian, Spanish, Polish, Czech, and Hungarian, etc.



Applications
 How many sheets are there in the pile? How great is the standard deviation of my results? Is my test sample within tolerance? A variety of applications, such as Statistics, Piece Counting, Percent Weighing, Totaling, and Formulation, etc. help you to find answers to these questions quickly and efficiently.



One-Touch-Function
 Weighing results at the touch of a button. Program the three **SmartKeys** in the keypad and gain direct access to the application you want. Every push of a button is confirmed with an audible signal and a symbol on the display for added security.



“With NewClassic I have a balance that I can program according to my wishes. A balance that is easy to operate and clean, and offers precise results. And has a few extras, such as an attractive design and the applications I need.”

A NewClassic User



Self-Diagnostics

An auditor wants to know when and how often a balance has been adjusted. Or you want to ensure that the keys are still working. Using the diagnostics program, you can quickly verify the most important balance functions, or access the history of previously saved checks.



Connectivity

Do you have to write down the weights of several dozen samples each day? Not any more. Thanks to the standard USB and RS232 interfaces, you can now conveniently transfer your data to your PC and continue working on it there, or print it out directly on any METTLER TOLEDO printer.

A Complete Picture

Product, Services, and Accessories

Our strength is based on product innovation, but also on a worldwide network of over 2500 experienced service technicians. We support you on-line and on-site with a comprehensive range of accessories and services, and share with you our expertise in weighing technology. In our daily business we assure the optimal quality of your weighing results and undertake our best to achieve a long-lasting lifetime for your balances.

At METTLER TOLEDO we continuously work on extending our range of accessories supporting you in optimizing your process efficiency. Printers, secondary displays, density kits, or anti-theft devices are just a few examples. Check out our comprehensive list of weighing aids on www.mt.com/newclassic – and find a solution for all your needs.



World's largest service network

Working with our weighing equipment gives you access to METTLER TOLEDO worldwide network of local service and training, providing you with professional support in a timely and efficient manner.



Installation & Calibration

Take advantage of METTLER TOLEDO's modular selection of standard service agreements, guaranteeing optimal performance and ensuring that your weighing equipment is delivering precise and reliable results.



Self-maintenance

Adapted to the NewClassic's self-diagnostics function, we offer you a set with relevant weights and Standard Operating Procedures (SOP) allowing you to achieve sustained balance uptime.

Optional Extras for More Versatility



Archive your data

Archive your weighing data results with METTLER TOLEDO compact printers: RS-P25 for simple printouts, RS-P26 with integrated real-time and date, or RS-P28 for advanced statistics.



Density Kit

Density determination becomes easy with METTLER TOLEDO's density kit for analytical and precision balances.



PipetteCheck

Balance and stand-alone pipette check-station combined, for checking pipette accuracy.



Auxiliary Display

For extra-visible weighing results from a distance.



PowerPac

Rechargeable battery for METTLER TOLEDO balances, offering up to 20 hours of independence from power supply.



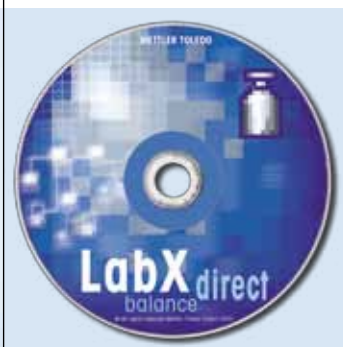
Draft Shield for Precision Balances

Fits METTLER TOLEDO precision balances, and protects the balance against air conditioning and turbulence.



Weights and CarePacs

For routine testing and adjustment of balances, with guaranteed traceability.



LabX Direct Balance

PC software for easy data transfer to standard computer programs (e.g. Microsoft™ Excel).



Transport Case

Protects the balance during transport.

For Every Purpose The Perfect Match



Metal Housing
High-grade chemical-resistant die-cast aluminum housing



MonoBloc
Proven weighing technology for fast and accurate results



Connectivity
RS232 to connect to PC, printer or bar code reader; USB to connect to PC



Overload Protection
Protects the weighing cell against excess weight overload



FACT
Fully automatic time- and temperature-controlled internal adjustment



SmartTrac
Shows how much of the entire weighing range has been used



OIML
Approved versions of all models available



Protective Cover
Encloses the entire housing, protecting the balances from stains and scratches



Diagnostics
Easy running of balance diagnostics test e.g. keypad test, repeatability test



Smart Key
Programmable keys for shortcut access to preferred applications



Protection
of main balance configurations against manipulation



Applications
Piece Counting, Percent Weighing, Check Weighing, Dynamic Weighing, Statistics



Technical Data	MS105	MS105DU	MS205DU	MS204
Limit Values				
Maximum capacity	120 g	120 g	220 g	220 g
Maximum capacity, fine range	-	42 g	82 g	-
Readability	0.01 mg	0.1 mg	0.1 mg	0.1 mg
Readability, fine range	-	0.01 mg	0.01 mg	-
Repeatability (at nominal load)	0.04 mg	0.08 mg	0.08 mg	0.09 mg
Repeatability (at low load)	0.02 mg (20 g)	-	-	0.07 mg (20 g)
Repeatability, fine range (at nominal load)	-	0.03 mg	0.05 mg	-
Repeatability, fine range (at low load)	-	0.02 mg (20 mg)	0.02 mg (20 mg)	-
Linearity deviation	0.1 mg	0.15 mg	0.2 mg	0.2 mg
Typical values				
Linearity deviation (within 10 g)	0.02 mg	0.02 mg	0.02 mg	-
Minimum sample weight (acc. to USP)	45 mg	45 mg	45 mg	150 mg
Minimum sample weight (U=1 %, k=2)	3 mg	3 mg	3 mg	10 mg
Settling time	8 s	4 s	4 s	2 s
Settling time, fine range	-	8 s	8 s	-
Balance dimensions (WxDxH in mm)	247x358x331	247x358x331	247x358x331	247x358x331
Weighing pan dimensions (mm)	∅ 80	∅ 80	∅ 80	∅ 80

Models with HRT (HiRes Technology) weighing cell



Technical Data	MS104S	MS204S	MS304S	MS303S	MS303SE	MS403S	MS603S	MS1003S
Limit Values								
Maximum capacity	120 g	220 g	320 g	320 g	320 g	420 g	620 g	1020 g
Readability	0.1 mg	0.1 mg	0.1 mg	0.001 g	0.001 g	0.001 g	0.001 g	0.001 g
Repeatability (at nominal load)	0.1 mg	0.1 mg	0.1 mg	0.001 g	0.001 g	0.001 g	0.001 g	0.001 g
Linearity deviation	0.2 mg	0.2 mg	0.2 mg	0.002 g	0.002 g	0.002 g	0.002 g	0.002 g
Typical values								
Repeatability (at nominal load)	0.08 mg	0.08 mg	0.08 mg	0.7 mg	0.7 mg	0.7 mg	0.7 mg	0.7 mg
Minimum sample weight (acc. to USP)	0.24 g	0.24 g	0.24 g	2.1 g	2.1 g	2.1 g	2.1 g	2.1 g
Minimum sample weight (U=1 %, k=2)	0.016 g	0.016 g	0.016 g	0.14 g	0.14 g	0.14 g	0.14 g	0.14 g
Settling time	2 s	2 s	3 s	1.5 s	1.5 s	1.5 s	1.5 s	1.5 s
Balance dimensions (W x D x H in mm)	204x347x348	204x347x348	204x347x348	204x347x283	204x347x283	204x347x283	204x347x283	204x347x283
Weighing pan dimensions (mm)	∅ 90	∅ 90	∅ 90	127x127	127x127	127x127	127x127	127x127



Technical Data	MS1602S	MS1602SE	MS3002S	MS3002SE	MS4002S	MS6002S	MS4002SDR	MS6002SDR
Limit Values								
Maximum capacity	1620 g	1620 g	3200 g	3200 g	4200 g	6200 g	4200 g	6200 g
Maximum capacity, fine range	-	-	-	-	-	-	1220 g	1220 g
Readability	0.01 g	0.01 g	0.01 g	0.01 g	0.01 g	0.01 g	0.1 g	0.1 g
Readability, fine range	-	-	-	-	-	-	0.01 g	0.01 g
Repeatability (at nominal load)	0.01 g	0.01 g	0.01 g	0.01 g	0.01 g	0.01 g	0.1 g	0.1 g
Repeatability, fine range (at nominal load)	-	-	-	-	-	-	0.01 g	0.01 g
Linearity deviation	0.02 g	0.02 g	0.02 g	0.02 g	0.02 g	0.02 g	0.2 g	0.2 g
Linearity deviation, fine range	-	-	-	-	-	-	0.02 g	0.02 g
Typical values								
Repeatability (at nominal load)	0.007 g	0.007 g	0.007 g	0.007 g	0.007 g	0.007 g	0.05 g	0.05 g
Repeatability, fine range (at nominal load)	-	-	-	-	-	-	0.007 g	0.007 g
Minimum sample weight (acc. to USP)	21 g	21 g	21 g	21 g	21 g	21 g	21 g	21 g
Minimum sample weight (U=1 %, k=2)	1.4 g	1.4 g	1.4 g	1.4 g	1.4 g	1.4 g	1.4 g	1.4 g
Settling time	1.5 s	1.5 s	1.5 s	1.5 s	1.5 s	1.5 s	1.5 s	1.5 s
Balance dimensions (W x D x H in mm)	194x347x99	194x347x99	194x347x99	194x347x99	194x347x99	194x347x99	194x347x99	194x347x99



Technical Data	MS6001S	MS8001S	MS8001SE
Limit Values			
Maximum capacity	6200 g	8200 g	8200 g
Readability	0.1 g	0.1 g	0.1 g
Repeatability (at nominal load)	0.1 g	0.1 g	0.1 g
Linearity deviation	0.2 g	0.2 g	0.2 g
Typical values			
Repeatability (at nominal load)	0.07 g	0.07 g	0.07 g
Minimum sample weight (acc. to USP)	210 g	210 g	210 g
Minimum sample weight (U=1 %, k=2)	14 g	14 g	14 g
Settling time	1 s	1 s	1 s
Balance dimensions (WxDxH in mm)	194x347x99	194x347x99	194x347x99



Technical Data	MS12001L	MS16001L	MS16001LE	MS32001L	MS32001LE	MS32000L	MS32000LE
Limit Values							
Maximum capacity	12200 g	16200 g	16200 g	32200 g	32200 g	32200 g	32200 g
Readability	0.1 g	0.1 g	0.1 g	0.1 g	0.1 g	1 g	1 g
Repeatability (at nominal load)	0.1 g	0.1 g	0.1 g	0.1 g	0.1 g	1 g	1 g
Linearity deviation	0.2 g	0.2 g	0.2 g	0.3 g	0.3 g	1 g	1 g
Typical values							
Repeatability (at nominal load)	0.07 g	0.07 g	0.07 g	0.07 g	0.07 g	0.4 g	0.4 g
Minimum sample weight (acc. to USP)	210 g	210 g	210 g	210 g	210 g	1500 g	1500 g
Minimum sample weight (U=1 %, k=2)	14 g	14 g	14 g	14 g	14 g	100 g	100 g
Settling time	2 s	2 s	2 s	2 s	2 s	1.5 s	1.5 s
Balance dimensions (WxDxH in mm)	363x346x118	363x346x118	363x346x118	363x346x118	363x346x118	363x346x118	363x346x118

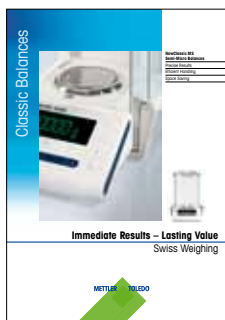
Technical Data	MS15KLE	MS30KLE	MS15KLIPE	MS24KLIPE
Limit Values				
Maximum capacity	15 kg	30 kg	15 kg	24 kg
Readability	2 g	5 g	2 g	5 g
Maximum capacity, approved version	6 kg / 15 kg	15 kg / 30 kg	6 kg / 15 kg	15 kg / 24 kg
Readability, approved version	2 g / 5 g	5 g / 10 g	2 g / 5 g	5 g / 10 g
Repeatability (at nominal load)	1 g	2 g	1 g	2 g
Linearity deviation	2 g	2 g	2 g	2 g
Typical values				
Repeatability (at nominal load)	0.08 g	0.08 g	0.08 g	0.08 g
Minimum sample weight (acc. to USP)	2400 g	2400 g	2400 g	2400 g
Minimum sample weight (U=1 %, k=2)	160 g	160 g	160 g	160 g
Settling time	0.8 s	0.8 s	0.8 s	0.8 s
Balance dimensions (WxDxH in mm)	363x346x122	363x346x122	363x346x122	363x346x122

E models: Adjustment with an external weight (without FACT)

KLE and KLIPE models with strain gauge weighing cell

Take the Direct Route to Your New Balance

Visit our virtual showroom at www.mt.com/newclassic to find out more about the NewClassic range. Take a closer look at the balances, download technical information, and get a feel for the many new functions designed to make the weighing process easier and more enjoyable. You can also use our QuickSearch or Assistant Wizard to identify the right balance for your requirements in just a few easy clicks.



For more information on the NewClassic MS Semi-Micro Balances.

www.mt.com/newclassic

For more information

GWP®
Good Weighing Practice™
www.mt.com/GWP



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GWP®
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The global weighing guideline GWP® reduces risks associated with your weighing processes and helps to

- choose the appropriate balance
- reduce costs by optimizing testing procedures
- comply with the most common regulatory requirements

www.mt.com/GWP