

# 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

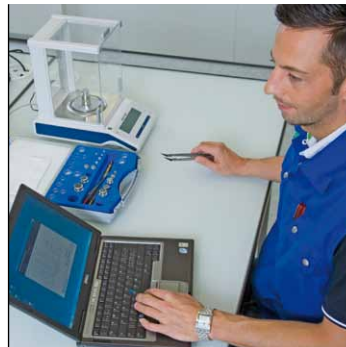
Our strength is based on product innovation, but also on a worldwide network of over 2500 experienced service technicians. We support you on-line and on-site with a comprehensive range of accessories and services, and share with you our expertise in weighing technology. In our daily business we assure 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](http://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

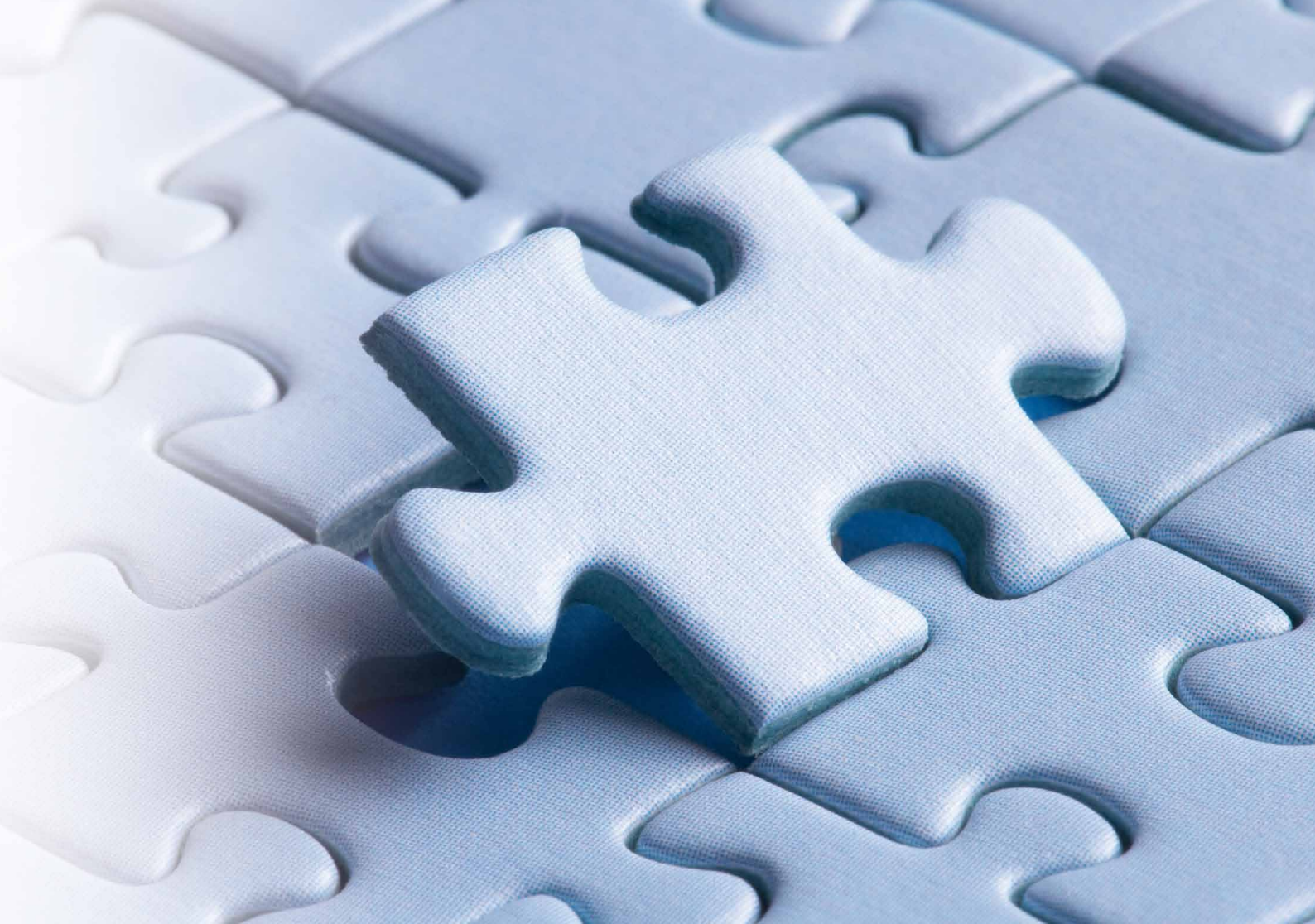
Take advantage of METTLER TOLEDO's modular selection of standard service agreements, guaranteeing optimal performance and ensuring that your weighing equipment is delivering precise and reliable results.



### 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.





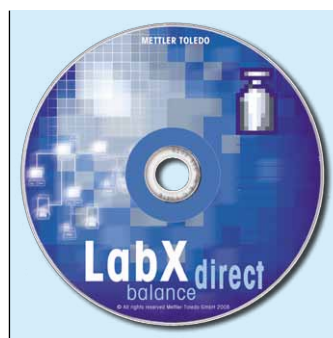
**RS-P25, RS-P26, RS-P28 Printer**

The fastest way to archive weighing data results: RS-P25 for simple print-outs, RS-P26 with integrated real-time and date information, or RS-P28 for advanced statistics and summation functions.



**Density kit**

Density determination becomes easy with METTLER TOLEDO's density kit for analytical and precision balances. It is ideal for solids, liquids, porous and viscous substances.



**LabX direct Balance**

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

# For Every Purpose The Perfect Match



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



**FACT**  
Fully automatic time- and temperature-controlled internal adjustment



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



**MonoBloc**  
Proven weighing technology for fast and accurate results



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



**Smart Key**  
Programmable keys for shortcut access to preferred applications



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



**OIML**  
Approved versions of all models available



**Protection** of main balance configurations against manipulation



**Overload Protection**  
Protects the weighing cell against excess weight overload



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



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



	<b>MS105*</b>	<b>MS105DU*</b>	<b>MS205DU*</b>	<b>MS104S</b>	<b>MS204S</b>	<b>MS304S</b>
Maximum capacity (fine range)	120 g	120 g (42 g)	220 g (82 g)	120 g	220 g	320 g
Readability	0.01 mg	0.1 mg	0.1 mg	0.0001g	0.0001g	0.0001g
Readability, fine range	-	0.01 mg	0.01 mg	-	-	-
Repeatability (sd)	0.04 mg	0.08 mg	0.08 mg	0.1mg	0.1mg	0.1mg
Repeatability (sd) **	0.02 mg	-	-	-	-	-
Repeatability (sd), fine range	-	0.03 mg	0.05 mg	-	-	-
Repeatability (sd), fine range **	-	0.02 mg	0.02 mg	-	-	-
Linearity	0.1 mg	0.15 mg	0.2 mg	0.2mg	0.2mg	0.2mg
Linearity (within 10 g) ***	0.02 mg	0.02 mg	0.02 mg	-	-	-
Stabilization time (fine range)	8s	4 s (8 s)	4 s (8 s)	2s	2s	3s
IP Protection	-	-	-	IP54 in use	IP54 in use	IP54 in use
Usable height of draft shield	234 mm	234 mm	234 mm	237 mm	237 mm	237 mm
Weighing pan dimensions	∅ 80 mm	∅ 80 mm	∅ 80 mm	∅ 90 mm	∅ 90 mm	∅ 90 mm
Balance dimensions LxWxH mm	358x247x331	358x247x331	358x247x331	347x204x345	347x204x345	347x204x345

\* HRT (HiRes Technology) weighing cell

\*\* At low load (20 g)

\*\*\* Typical value



	<b>MS303S</b> <b>MS303SE*</b>	<b>MS403S</b>	<b>MS603S</b>	<b>MS1003S</b>
Maximum capacity	320 g	420 g	620 g	1020 g
Readability	0.001 g	0.001 g	0.001 g	0.001 g
Repeatability (sd)	0.001 g	0.001 g	0.001 g	0.001 g
Linearity	0.002 g	0.002 g	0.002 g	0.002 g
Stabilization time	1.5 s	1.5 s	2 s	2 s
IP Protection	IP54 in use	IP54 in use	IP54 in use	IP54 in use
Usable height of draft shield	165 mm	165 mm	165 mm	165 mm
Weighing pan dimensions	127x127 mm	127x127 mm	127x127 mm	127x127 mm
Balance dimensions LxWxH	347x204x280 mm	347x204x280 mm	347x204x280 mm	347x204x280 mm

\* Adjustment with an external weight (without FACT)



	<b>MS1602S MS1602SE*</b>	<b>MS3002S MS3002SE*</b>	<b>MS4002S</b>	<b>MS6002S</b>	<b>MS4002SDR**</b>	<b>MS6002SDR**</b>
Maximum capacity	1620 g	3200 g	4200 g	6200 g	4200 g	6200 g
Maximum capacity**	–	–	–	–	820 g	1220 g
Readability	0.01 g	0.01 g	0.01 g	0.01 g	0.1 g	0.1 g
Readability**	–	–	–	–	0.01 g	0.01 g
Repeatability (sd)	0.01 g	0.01 g	0.01 g	0.01 g	0.06 g	0.06 g
Repeatability (sd)**	–	–	–	–	0.01 g	0.01 g
Linearity	0.02 g	0.02 g	0.02 g	0.02 g	0.2 g	0.2 g
Linearity, fine range	–	–	–	–	0.02 g	0.02 g
Stabilization time	1.5 s	1.5 s	1.5 s	1.5 s	1.5 s	1.5 s
IP Protection	IP54 in use	IP54 in use	IP54 in use	IP54 in use	IP54 in use	IP54 in use
Weighing pan dimensions	170x200 mm	170x200 mm	170x200 mm	170x200 mm	170x200 mm	170x200 mm
Balance dimensions LxWxH	347x194x96 mm	347x194x96 mm	347x194x96 mm	347x194x96 mm	347x194x96 mm	347x194x96 mm

\* Adjustment with an external weight (without FACT)

\*\* Delta Range: fine range up to 20% of the weighing range, depending on the model



	<b>MS6001S</b>	<b>MS8001S MS8001SE*</b>	<b>MS12001L</b>	<b>MS16001L MS16001LE*</b>	<b>MS32001L MS32001LE*</b>	<b>MS32000L MS32000LE*</b>
Maximum capacity	6200 g	8200 g	12200 g	16200 g	32200 g	32200 g
Readability	0.1 g	0.1 g	0.1 g	0.1 g	0.1 g	1 g
Repeatability (sd)	0.1 g	0.1 g	0.1 g	0.1 g	0.1 g	0.5 g
Linearity	0.2 g	0.2 g	0.2 g	0.2 g	0.3 g	1 g
Stabilization time	1 s	1 s	2 s	2 s	2 s	1.5 s
IP Protection	IP54 in use	IP54 in use	IP54 in use	IP54 in use	IP54 in use	IP54 in use
Weighing pan dimensions	190x226 mm	190x226 mm	351x245 mm	351x245 mm	351x245 mm	351x245 mm
Balance dimensions LxWxH	347x194x96 mm	347x194x96 mm	346x363x118 mm	346x363x118 mm	346x363x118 mm	346x363x118 mm

\* Adjustment with an external weight (without FACT)



	<b>MS15KLE</b>	<b>MS30KLE</b>	<b>MS15KLIPE</b>	<b>MS24KLIPE</b>
Maximum capacity	15 kg	30 kg	15 kg	24 kg
Readability	2 g	2 g	2 g	2 g
Weighing range (approved version)	6 / 15 kg	15 / 30 kg	6 / 15 kg	15 / 24 kg
Readability (approved version)	2 / 5 g	5 / 10 g	2 / 5 g	5 / 10 g
Repeatability (sd)	1 g	2 g	1 g	2 g
Linearity	2 g	2 g	2 g	2 g
Stabilization time	1 s	1 s	1 s	1 s
IP Protection	IP54 in use	IP54 in use	IP65	IP65
Weighing pan dimensions	351x245 mm	351x245 mm	351x245 mm	351x245 mm
Balance dimensions LxWxH	346x363x122 mm	346x363x122 mm	346x363x122 mm	346x363x122 mm

KLE and KLIPE models with strain gauge weighing cell and adjustment with an external weight (without FACT)

KLIPE models with RS232 only



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.