

## Trusted Results at Your Fingertips Worry-free Weighing



### **Built-in function simplifies balance leveling**

The built-in LevelControl function issues a warning when the balance is not level and provides onscreen guidance to help you level the balance correctly within seconds.



### **MinWeigh function ensures process tolerances**

The weight value remains red until the net sample is above the pre-programmed minimum value. A user-defined minimum weight can also be programmed into the balance to provide an additional safety factor.



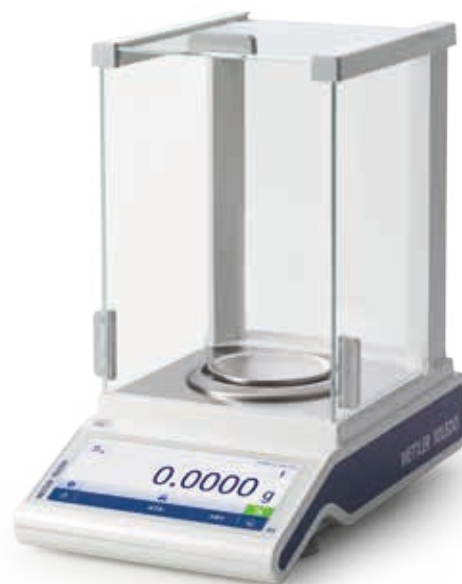
### **Passcodes protect balance settings**

Create a passcode to restrict modification of balance settings to authorized personnel only – functions that affect metrological performance are protected against accidental alteration.



### **Easy-cleaning features save time and effort**

Remove, clean and replace all of the QuickLock draft shield glass panels in just a few simple steps, without tools and without moving the balance. The housing has smooth surfaces and rounded edges for easy cleaning.



### **MS-TS Analytical Balances Trusted Performance**

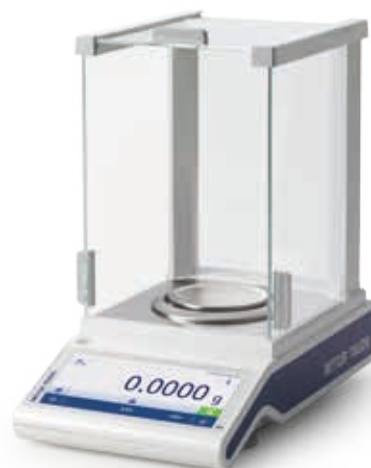
The built-in security features on MS-TS analytical balances ensure results are always valid. Operators receive a warning if any problems are encountered or tolerances are not adhered to. Corrective actions can be taken immediately, avoiding costly reworking later.

LevelControl, MinWeigh and automatic internal adjustment with proFACT support compliance with regulations. The ISOLog function maintains a record of all weighing relevant changes to the balance's settings. For additional security, settings can be passcode protected.

The 7" extra-large color TFT touchscreen display is operable through cotton, silicon and rubber gloves. An intuitive user interface and 18mm high digits bring comfort to your daily tasks.

## MS-TS Analytical Balances

Technical Specifications	MS104TS	MS204TS	MS304TS
<b>Limit values</b>			
Maximum capacity	120 g	220 g	320 g
Readability	0.1 mg	0.1 mg	0.1 mg
Tare range (from ... to)	0 ... 120 g	0 ... 220 g	0 ... 320 g
Repeatability (nominal) (sd)	0.1 mg (100 g)	0.1 mg (100 g)	0.1 mg (100 g)
Linearity deviation (test load)	0.2 mg (20 g)	0.2 mg (50 g)	0.2 mg (50 g)
Eccentricity deviation (test load) <sup>1</sup>	0.4 mg (50 g)	0.4 mg (100 g)	0.4 mg (100 g)
Sensitivity offset (test weight)	0.8 mg (100 g)	1 mg (200 g)	1.5 mg (300 g)
Sensitivity temperature drift <sup>2</sup>	1.5 ppm/°C	1.5 ppm/°C	1.5 ppm/°C
Sensitivity stability <sup>3</sup>	2.5 ppm/a	2.5 ppm/a	2.5 ppm/a
<b>Typical values</b>			
Repeatability (at low load)	0.08 mg	0.08 mg	0.08 mg
Linearity deviation	0.06 mg	0.06 mg	0.06 mg
Eccentric deviation (test load) <sup>1</sup>	0.1 mg (50 g)	0.12 mg (100 g)	0.12 mg (100 g)
Sensitivity offset (test weight)	0.2 mg (100 g)	0.24 mg (200 g)	0.6 mg (300 g)
USP minimum sample weight (5% load, k=2, U=0.10%)	160 mg	160 mg	160 mg
Minimum sample weight (5% load, k=2, U=1%)	16 mg	16 mg	16 mg
Settling time	2 s	2 s	3 s
Weighing pan dimensions (mm)	∅ 90	∅ 90	∅ 90



- 1) according to OIML R76;  
 2) in the temperature range 10 to 30°C,  
 3) Stability of sensitivity with proFACT self-adjustment switched on;  
 s: seconds; a: year (annum);  
 sd: standard deviation

### Embedded applications

Weighing, statistics for all applications, check weighing, totaling, piece counting, formulation, percent weighing, factor weighing, dynamic weighing, density, dosing and PC Direct (for easy data transfer).

### Features

<b>Accurate Results</b>	MonoBloc weighing cell Strong overload protection proFACT internal adjustment MinWeigh warning function Full metal housing
<b>Efficient Operation</b>	7" Extra-large color TFT touchscreen 18mm high digits LevelControl function Statistical data analysis Easy cleaning and QuickLock
<b>Quality Assurance</b>	ISO-Log Sample ID input Passcode protection
<b>Seamless Process</b>	3 interfaces: USB device, USB host, RS232 Bluetooth option PC Direct application

### Accessories

#### P-5x thermal printers



Fast, high quality printouts on paper, self-adhesive labels and continuous self-adhesive paper (including barcodes).

#### Bluetooth adaptors



Wirelessly send data between the balance and a PC, tablet or printer. No additional software needed.

#### SmartPrep™



Single-use, antistatic funnels enable safe and fast weighing-in of powders. Simply weigh, transfer and rinse.

#### Density kit



Dedicated kit for determining the density of solid and liquid substances with the built-in application.

#### U-electrode



The freestanding U-Electrode removes electrostatic charges on samples and containers.

For further information on accessories, please visit [www.mt.com/lab-accessories](http://www.mt.com/lab-accessories)

**GWP®**  
Good Weighing Practice™  
[www.mt.com/GWP](http://www.mt.com/GWP)



**Mettler-Toledo AG**  
Laboratory Weighing  
CH-8606 Greifensee, Switzerland  
Tel. +41 44 944 22 11  
Fax +41 44 944 30 60

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Global MarCom Switzerland

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