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 FACT 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.

METTLER TOLEDO

MS-TS Analytical Balances

Technical Specifications	MS104TS	MS204TS	MS304TS
Limit values			
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)[1]	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[2]	1.5 ppm/°C	1.5 ppm/°C	1.5 ppm/°C
Sensitivity stability[3]	2.5 ppm/a	2.5 ppm/a	2.5 ppm/a
Typical values			
Repeatability (at low load)	0.08 mg	0.08 mg	0.08 mg
Linearity deviation	0.06 mg	0.06 mg	0.06 mg
Eccentricity deviation (test load)[1]	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 FACT 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

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

Accessories

P-50 Excellence 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**

www.mt.com/ms-analytical

For more information