Excellence Level

Excellence XSR Balances

Discover Efficiency in Daily Weighing

METTLER TOLEDO

XSR Balances
Fast and Accurate Results

Whether you need to weigh several kilograms or just a few grams, Excellence XSR balances offer a winning combination of reliable performance and truly ergonomic operation.

Even under the harshest of weighing conditions, you can rely on these robust balances to help you meet your productivity targets. They are the perfect choice when you have high sample throughput and tight timelines. XSR balances get the job done, no matter how difficult the weighing conditions.

Robust performance
XSR balances are not only robust in construction, but also offer high performance even in the tough weighing conditions of a fume hood, next to a production line or in areas with high people traffic.

Maximum productivity
Reliable performance, efficient weighing processes and the reduced need for manual data input / output save you time, reduce errors and ensure maximum productivity.

Ergonomic operation
Thanks to ergonomic design, the adjustable ErgoStand and the bright, user-friendly display, XSR balances are easy and comfortable to use, even during extended periods of use.

"I need accurate results quickly, in order to ensure a fast turnaround for our customers."

XSR Balance Portfolio
Trust in Quality

You can rely on METTLER TOLEDO's reputation and years of weighing competence to bring you high quality balances that will help you get your daily tasks done efficiently with results you can trust.

Thanks to a clever mix of features, these tough balances deliver fast and accurate results, and are comfortable and ergonomic to use. Results and task parameters are safely recorded on the built-in results protocol, eliminating manual transcription and providing error-free data transfer. Overload protection, easy-cleaning features and resistance to harsh chemicals mean your balance will provide you with reliable service for many years to come.

Analytical
Capacity range: 62 g – 320 g
Readability: 0.01 mg – 0.1 mg
USP min. weight range:
16 mg – 82 mg

Precision 1 mg
Capacity range: 310 g – 1210 g
Readability: 1 mg
USP min. weight range:
820 mg – 1 g

Precision 10 mg
Capacity range: 1210 g – 6.1 kg
Readability: 10 mg
USP min. weight range:
8.2 g – 10 g

SmartPan™ models
SmartPan weighing pans minimize the effects of air drafts on the weighing cell, significantly improving stability and measurement accuracy.

Precision 100 mg
Capacity range: 4.1 kg – 10.1 kg
Readability: 0.1 g
USP min. weight:
82 g

Precision high capacity
Capacity range: 10.1 kg – 32.1 kg
Readability: 0.1 g – 1 g
USP min. weight range:
82 g – 820 g

XSR Analytical Balances
Simplified Weighing Processes

XSR analytical balances deliver the high weighing accuracy you want whilst providing the convenient operation you need. Clever features, such as SmartGrid, automated doors and the results protocol, simplify your routine weighing tasks, and take the stresses and strains out of weighing.

Built-in applications support you with everyday weighing tasks. Your own weighing methods can be saved on the balance and conveniently started from the quick-access methods menu. StatusLight™ checks that all the conditions for correct weighing have been met to ensure your results are reliable.

Automatic doors
The motorized draft shield doors simplify weighing processes and help increase efficiency. The doors can be set to different degrees of automation, such as closing automatically when you tare the balance.

Intuitive operation
Integrated methods, guided workflows and the results protocol simplify your tasks. With clear icons and easy access menus, the color touchscreen is easy to operate, even whilst wearing protective gloves.

Ergonomic design
Clever features enable more comfortable weighing processes and the small footprint saves valuable bench space. The low-positioned weighing pan allows you to rest your hand on the table for effortless manual dosing.

Effortless connectivity
Connection to a data system is as easy as plugging in a cable. With easy, error-free data transfer and full compatibility with ERP and LIMS, XSR balances fit perfectly into your existing information system.
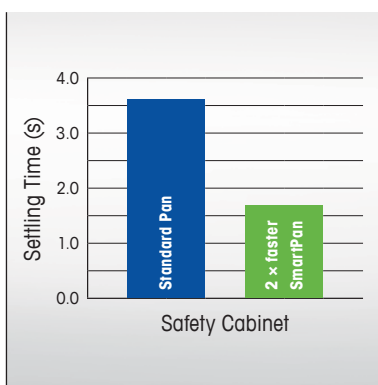

Easy cleaning
All parts of the balance draft shield and SmartGrid weighing pan can be disassembled in seconds and cleaned in the laboratory dishwasher, minimizing cross-contamination and ensuring user safety.

XSR Precision Balances
Durability You Can Rely On

Tough jobs need tough equipment. XSR precision balances have been designed to withstand harsh chemicals, dust and dirt. Even splashing liquids are no match for XSR, and built-in overload protection safeguards the weighing cell against the accidental addition of excess weight.

The innovative SmartPan weighing pan minimizes the effects of air currents on the weighing cell to dramatically improve stabilization time and repeatability, even when working in a fume hood or challenging production environment.

Fast and accurate results
The high stability provided by SmartPan means you get your results up to twice as fast compared to a standard weighing pan. Even when weighing in challenging conditions, repeatability is improved up to two-fold.

Efficient processes
Saved weighing methods make it quick to start daily tasks and all related parameters are stored on the built-in results protocol. Time-consuming and error-prone manual data input/output can be eliminated.

Error-free data transfer
Multiple interfaces (4 USB, 1 LAN) provide error-free data transfer and many connection possibilities. The balance software recognizes and configures a connected device in seconds, enabling you to get started right away.

Weigh with no draft shield
SmartPan enables you to use your 1 mg balance in standard conditions without a draft shield. Thanks to the reduced number of process steps, weighing is more comfortable and efficient for balance users.

Ergonomic operation
Placing the display at eye-level on the adjustable ErgoStand™ saves space and eliminates excessive bending of the neck. The touchscreen display simplifies operation and has large, bright figures which are easy to read.

Accessories
Small Details. Big Difference.

METTLER TOLEDO balances can be customized with accessories and peripheral devices to meet the needs of virtually any application. Our expertly designed accessories make your work easier, reduce fatigue, and increase accuracy and productivity.

View our range of over 200 accessories online.
▶ **www.mt.com/accessories**

LabX Laboratory Software

For ultimate weighing efficiency and guaranteed traceability, connect your balance to LabX:
• SOP user guidance on the balance display
• Automatic calculations and data handling
• Central management of instruments, results and tasks

▶ **www.mt.com/labx**

Peripheral devices

Choose from a wide range of devices to optimize your weighing processes, including:
• Printers for fast, high quality printouts on paper and labels
• Barcode reader for error-free data transfer
• Foot switch for ergonomic balance operation

Sample preparation

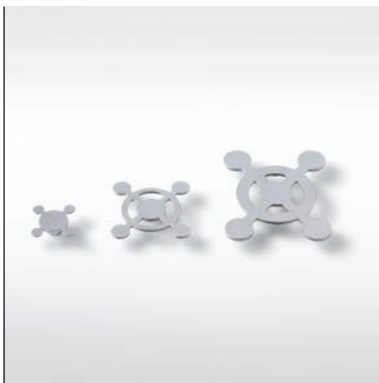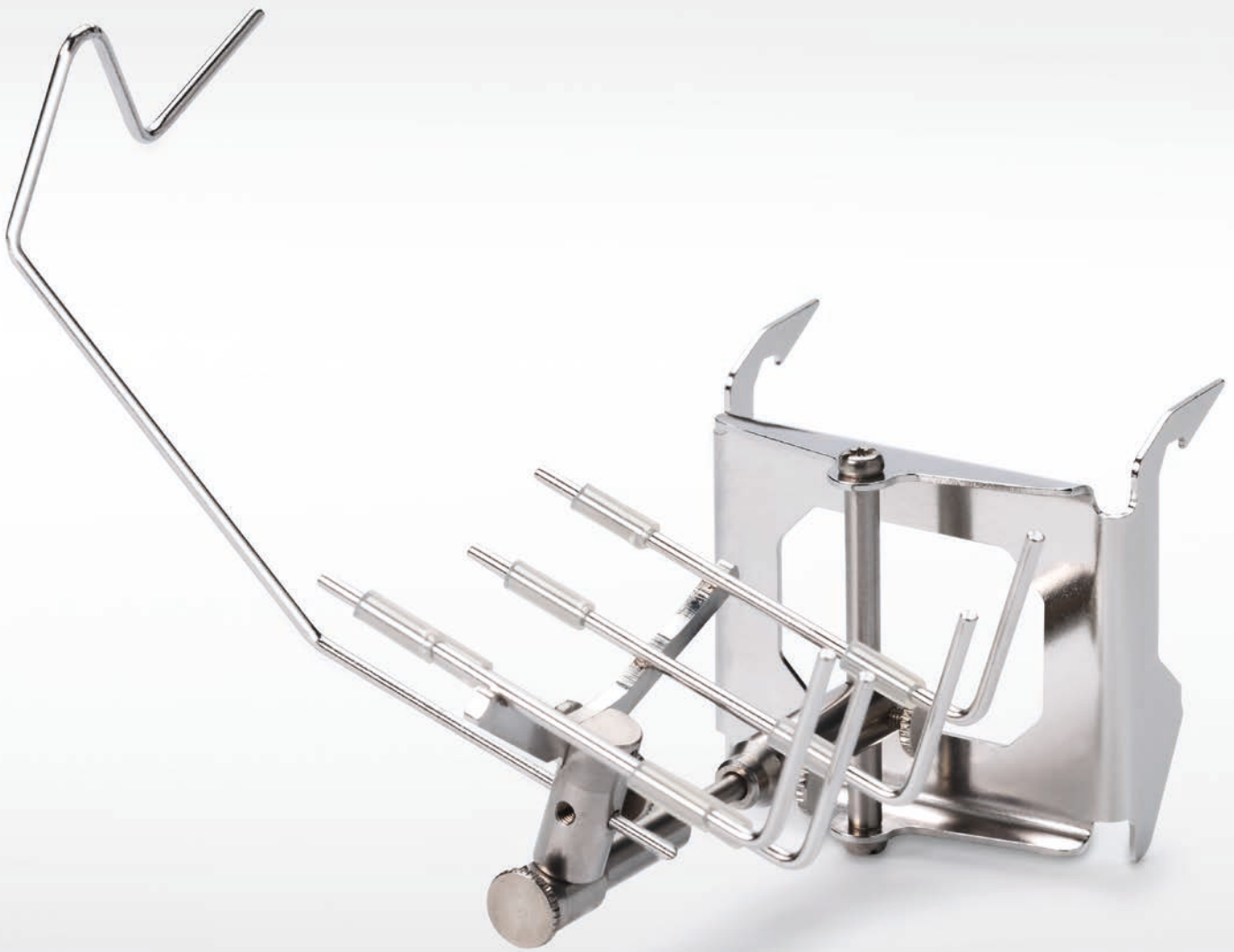Convenient, safe sample preparation and transfer:
• ErgoClip container holders for one-step dosing
• SmartPrep dosing funnels for easy sample transfer
• Spatulas

Anti-static solutions

Fast and efficient elimination of electrostatic charges from your samples and containers (analytical and precision balances):
• Free-standing ionizing electrodes
• ErgoClip container holders for use as Faraday Cages

Weighing pans/draft shields
For improved weighing
performance and more reliable
results:
- Draft shields to protect the
  weighing cell from air currents
- Weighing pans and magnetic
  protection shield pan

Balance protection
Ensure your balance stays safe
at all times:
- Protective covers for the
  balance, terminal and
  weighing pan guard against
  dirt and damage
- Anti-theft devices prevent
  unauthorized balance removal
- Dedicated cases for safe
  transportation

Test weights
For routine testing and calibration
of balances:
- Weight sets
- CarePacs
- Weight handling tools

Consistently Accurate Results
In Three Simple Steps

As a key stage in your workflow, accurate weighing is essential to ensure you deliver quality products in a cost-effective manner. In accordance with our globally recognized Good Weighing Practice™ (GWP®), METTLER TOLEDO's Sales and Service team can help you achieve consistently accurate and reliable weighing results.

The scientific based GWP® program matches your weighing process requirements to the performance of the balance and the necessary maintenance activities. This approach ensures selection of the appropriate balance and protects you from experiencing undetected sample waste and unnecessary process repetitions. Our expertise means you can enjoy top weighing performance, maximum uptime and compliance with the norms and standards relevant to your industry, while maintaining budget control.

1. Selection
Our free GWP® Recommendation service provides documentary evidence that the selected balance meets your specific process, quality and regulatory requirements. It gives you the knowledge you need to make the correct balance purchase decision.

2. Installation
Our Installation Pacs document balance installation and qualification in accordance with regulations and provide guidance on controlling environmental influences that may affect accuracy. The integral user training ensures balances are used correctly from day one.

3. Calibration and routine testing
Balance calibration is essential for accurate results. GWP® Verification service proves balance accuracy on-site and includes an optimal routine testing and calibration schedule, specification of the required test weights, and the ideal maintenance plan.

Your METTER TOLEDO service technician uses the information from your GWP® Verification and the balance calibration to program the built-in GWP Approved quality assurance function. GWP Approved prompts you to carry out calibration and routine balance tests in accordance with your specific accuracy requirements. A record of all tests is maintained that is suitable for audit purposes. Your benefit: GWP Approved documents the proven validity of every single result over the balance lifetime.

Good Weighing Practice™
The Highest Quality Standard in Weighing

▶ **www.mt.com/gwp**

XSR Balances
Technical Specifications

XSR Analytical
Readability 0.01 mg

	XSR105	XSR105DU	XSR205DU	XSR225DU
Material number	30355059	30355435	30355396	30355364
Maximum capacity (full range/fine range)	120 g	120 g/41 g	220 g/81 g	220 g/121 g
Readability (full range/fine range)	0.01 mg	0.1 mg/0.01 mg	0.1 mg/0.01 mg	0.1 mg/0.01 mg
Repeatability[1] (5% load)	0.008 mg	0.01 mg	0.01 mg	0.01 mg
Sensitivity offset, nominal load[1]	0.08 mg	0.2 mg	0.16 mg	0.16 mg
Settling time[1]	3 s	1.5 s	1.5 s	1.5 s
Minimum weight (k=2, U=1%)[2]	1.6 mg	2 mg	2 mg	2 mg
Minimum weight (according to USP)[2]	16 mg	20 mg	20 mg	20 mg

[1] Typical value; [2] Minimum weight typical at 5% load

Readability 0.1 mg

	XSR64	XSR104	XSR204	XSR204DR	XSR304
Material number	30355481	30355485	30355500	30355491	30355496
Maximum capacity (full range/fine range)	61 g	120 g	220 g	220 g/81 g	320 g
Readability (full range/fine range)	0.1 mg	0.1 mg	0.1 mg	1 mg/0.1 mg	0.1 mg
Repeatability[1] (5% load)	0.04 mg	0.04 mg	0.04 mg	0.04 mg	0.04 mg
Sensitivity offset, nominal load[1]	0.12 mg	0.2 mg	0.24 mg	0.24 mg	0.24 mg
Settling time[1]	1.5 s	1.5 s	1.5 s	1.5 s	1.5 s
Minimum weight (k=2, U=1%)[2]	8.2 mg	8.2 mg	8.2 mg	8.2 mg	8.2 mg
Minimum weight (according to USP)[2]	82 mg	82 mg	82 mg	82 mg	82 mg

[1] Typical value; [2] Minimum weight typical at 5% load

XSR Precision S-Platform
Readability 1 mg

	XSR303SN[3]	XSR303S	XSR603SN[3]	XSR603S	XSR1203S
Material number	30316500	30315757	30316544	30316497	30316567
Maximum capacity	310 g	310 g	610 g	610 g	1210 g
Readability	1 mg	1 mg	1 mg	1 mg	1 mg
Repeatability[1] (5% load)	0.5 mg	0.5 mg	0.5 mg	0.5 mg	0.4 mg
Sensitivity offset, nominal load[1]	1.2 mg	1.2 mg	1.2 mg	1.2 mg	1.5 mg
Settling time[1]	1.5 s	1.5 s	1.5 s	1.5 s	1.5 s
Minimum weight (k=2, U=1%)[2]	100 mg	100 mg	100 mg	100 mg	82 mg
Minimum weight (according to USP)[2]	1 g	1 g	1 g	1 g	820 mg
Weighing pan	SmartPan	Standard pan, SmartPan	SmartPan	Standard pan, SmartPan	Standard pan, SmartPan

[1] Typical value; [2] Minimum weight typical at 5% load; [3] Supplied without draft shield (avalable as an accessory)

Readability 0.01 g

	XSR1202S	XSR2002S	XSR4002S	XSR6002SDR	XSR6002S	XSR10002S
Material number	30317127	30317407	30317443	30317462	30317453	30317437
Maximum capacity (full range/fine range)	1210 g	2.1 kg	4.1 kg	6.1/1.2 kg	6.1 kg	10.1 kg
Readability (full range/fine range)	0.01 g	0.01 g	0.01 g	0.1/0.01 g	0.01 g	0.01 g
Repeatability[1] (5% load)	4 mg	4 mg	4 mg	5 mg	4 mg	4 mg
Sensitivity offset, nominal load[1]	15 mg	25 mg	25 mg	30 mg	12 mg	12 mg
Settling time[1]	1.2 s	1.2 s	1.2 s	1.2 s	1.2 s	1.5 s
Minimum weight (k=2, U=1%)[2]	820 mg	820 mg	820 mg	1 g	820 mg	820 mg
Minimum weight (according to USP)[2]	8.2 g	8.2 g	8.2 g	10 g	8.2 g	8.2 g
Weighing pan	Standard pan, SmartPan	Standard pan, SmartPan	Standard pan, SmartPan	Standard pan, SmartPan	Standard pan, SmartPan	Standard pan, SmartPan

[1] Typical value; [2] Minimum weight typical at 5% load

Readability 0.1 g

	XSR4001S	XSR6001S	XSR8001S	XSR10001S
Material number	30317501	30317496	30317515	30317487
Maximum capacity	4.1 kg	6.1 kg	8.1 kg	10.1 kg
Readability	0.1 g	0.1 g	0.1 g	0.1 g
Repeatability[1] (5% load)	40 mg	40 mg	40 mg	40 mg
Sensitivity offset, nominal load[1]	50 mg	50 mg	120 mg	120 mg
Settling time[1]	0.8 s	0.8 s	1 s	1 s
Minimum weight (k=2, U=1%)[2]	8.2 g	8.2 g	8.2 g	8.2 g
Minimum weight (according to USP)[2]	82 g	82 g	82 g	82 g
Weighing pan	Standard pan	Standard pan	Standard pan	Standard pan

[1] Typical value; [2] Minimum weight typical at 5% load

XSR Precision L-Platform
Readability 0.1 g / 1 g

	XSR10001L	XSR16001L	XSR32001LDR	XSR32001L	XSR16000L	XSR32000L
Material number	30317536	30317549	30316472	30316297	30316481	30316489
Maximum capacity (full range/fine range)	10.1 kg	16.1 kg	32.1/6.4 kg	32.1 kg	16.1 kg	32.1 kg
Readability (full range/fine range)	0.1 g	0.1 g	1/0.1 g	0.1 g	1 g	1 g
Repeatability[1] (5% load)	40 mg	40 mg	40 mg	40 mg	400 mg	400 mg
Sensitivity offset, nominal load[1]	120 mg	200 mg	320 mg	100 mg	400 mg	400 mg
Settling time[1]	1.5 s	1.5 s	1.5 s	1.5 s	1.2 s	1.2 s
Minimum weight (k=2, U=1%)[2]	8.2 g	8.2 g	8.2 g	8.2 g	82 g	82 g
Minimum weight (according to USP)[2]	82 g	82 g	82 g	82 g	820 g	820 g
Weighing pan	Standard pan	Standard pan	Standard pan	Standard pan	Standard pan	Standard pan

[1] Typical value; [2] Minimum weight typical at 5% load

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