

Excellence Line



### Analytical Balances

Easy Balance Management

Electrostatic Solutions

Full Process Control



**Worry-free Weighing**  
Follow the Green Light

**METTLER TOLEDO**

# Worry-free Weighing

## Follow the Green Light

**METTLER TOLEDO introduces a new dimension in analytical weighing with a combination of intelligent features to make your daily weighing tasks easy and error-free. You not only benefit from the outstanding weighing performance of Excellence Analytical Balances but you can also be sure of full regulatory compliance and high process security.**

- **Easy Balance Management**
- **Electrostatic Solutions**
- **Full Process Control**

**Enjoy weighing with METTLER TOLEDO innovations.**



**Carlos Rivera**  
Laboratory Technician



**Meihui Taylor**  
Laboratory Manager



**Robert Anderson**  
Quality Manager



# Balance Ready

“I Know Weighing is Safe!”

Intelligent new security tools monitor the balance status to ensure that it is safe to start your weighing task. The innovative StatusLight™ lets you see at a glance if you have the green light for weighing: balance calibration and routine tests are up to date and the balance is level and functioning correctly.

## Status at a Glance



The StatusLight built into the terminal uses color to indicate intuitively the status of the balance: Green means ready, yellow is a warning and errors are shown with red. The StatusLight clearly communicates if the balance is ready for you to start your weighing task.

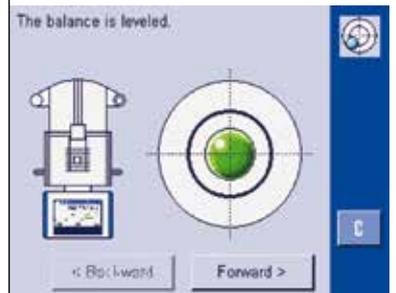


## Guided Testing



Never miss a calibration or routine test again. Using the balance touchscreen, your testing SOPs can be implemented in the Test-Manager™ embedded software. Whenever a test is due, a message will be displayed on the screen and you can simply follow the test instructions provided.

## Always Level



The new LevelGuide™ provides you with a warning when the balance is not level. Full instructions and a graphical bubble are shown on the touchscreen so you can level your balance in seconds.

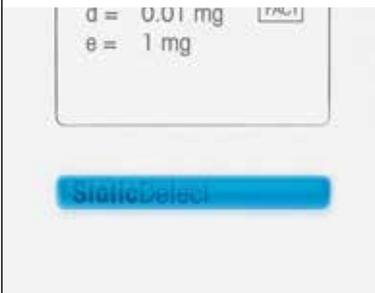


# Sample OK

## “Electrostatic Issues Don’t Bother Me!”

**Electrostatic charge is a major challenge in analytical weighing. Through normal handling, containers and samples can easily become charged, leading to weighing errors. The charge may also cause particles from powdered samples to be scattered, creating additional problems when handling valuable or toxic substances. Our intelligent electrostatic detection and discharging solutions prevent weighing errors and make sample handling easier and safer.**

### Detecting Charges



Our StaticDetect™ technology detects electrostatic charge on the sample and/or its container. The weighing error is measured and a warning is given if the user-defined limit is exceeded. Antistatic measures can then be employed. For the highest process security, release of the weighing result can be blocked.

### Eliminating Charges



The new compact antistatic kit can be used to gently generate charged ions and hence eliminate electrostatic charge without causing turbulence in the weighing chamber. The steady stream of ions prevents cross-contamination of samples and removes the threat to users when handling toxic substances.

### Antistatic ErgoClip



The ErgoClip™ basket acts as a Faraday Cage to shield the balance from any electrostatic charge which could be present on glass and plastic tubes. Weighing samples in tubes is therefore more safe and reliable.



# Processes Under Control

## “Another Milestone in Error Reduction!”

**METTLER TOLEDO’s LabX software brings power to your laboratory bench as the perfect solution to guarantee process security and manage measurement uncertainty. LabX is unmatched in providing flexible SOP user guidance on the balance touchscreen. Automatic data handling, calculations, and report generation mean no more writing by hand. Transcription errors are eliminated and full traceability is assured. Excellence balances powered by LabX easily fulfill the highest process security requirements and supports you in your steps towards establishing a paperless lab.**

### Full SOP User Guidance



LabX provides step-by-step user guidance on the balance touchscreen so you can be sure your SOP is followed precisely. Centralized instrument management means all your balances automatically display the same SOP instructions to guarantee consistency in your lab.

### Safe Data Exchange and Storage

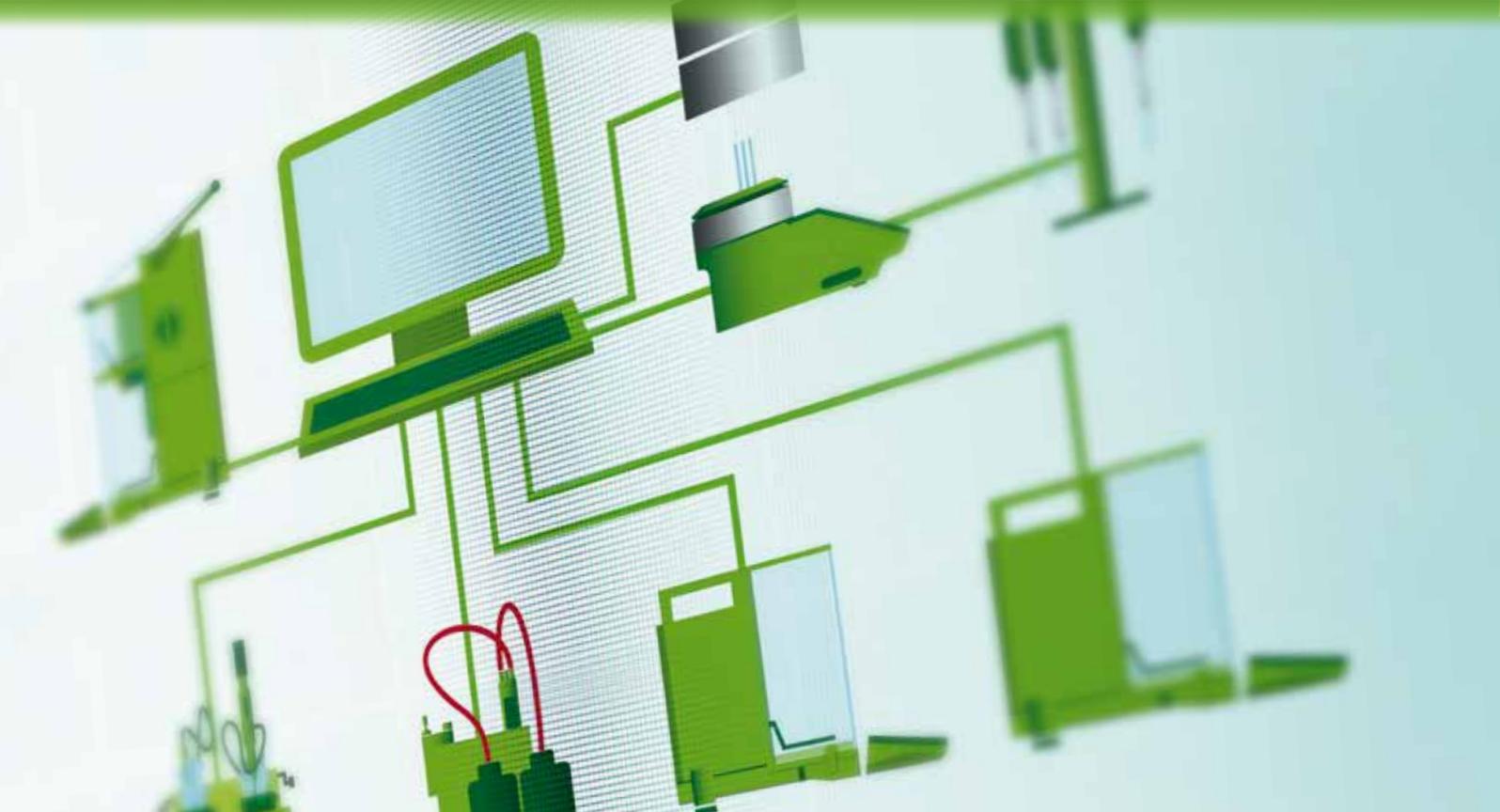


All weighing results and process information is transferred automatically and saved centrally in a secure database. This provides full traceability of your results and assists in compliance with FDA 21 CFR Part 11.

### Go Paperless



LabX is easily integrated into your laboratory and your existing information control environment. Bi-directional communication with LIMS, ELNs and other data management systems makes it easy and secure to distribute tasks and transfer results.



# Perfected Weighing Technology Ensures Reliable Results

**Excellence Analytical Balances** combine patented **METTLER TOLEDO** weighing technologies with decades of weighing expertise to ensure you get the best weighing results – quickly and reliably! Designed, engineered and manufactured in Switzerland for outstanding quality you can trust.



### **Integrated Antistatic Solution**

XPE Analytical Balance with compact antistatic kit.



### **Balance StatusLight**

Green light for safe weighing  
Balance status at a glance  
Visible from a distance



**StaticDetect Technology**

No error from electrostatic influences  
Safe weighing within tolerances  
Release of results can be blocked

**SmartGrid Weighing Pan**

No error from spillage  
Fast and stable results  
Easy Cleaning

**High Resolution Weighing Cell**

Unique, patented cell concept  
Small footprint without separate electronics  
USP minimum weights as low as 14 mg

# Unique Balance Ergonomics

## Make Weighing Intuitive and Safe

Excellence Analytical Balances have been ergonomically designed to make your life as easy as possible. We have thought about how each of your laboratory tasks can be performed in the most comfortable and efficient way. METTLER TOLEDO takes care of the little details that make the difference.



### Intuitive Operation



The enhanced touchscreen user interface offers tireless, intuitive balance operation. SmartSens™ sensors allow you to operate your balance with the wave of a hand, making weighing tasks easier and avoiding cross-contamination issues (e.g. opening/closing draft shield door).

### Smart Dosing



The color-guided SmartTrac™ function makes it easy to dose to your target weight and stay within tolerances. Using the appropriate ErgoClip enables you to dose directly into your container in one easy step.

### Easy Cleaning



The draft shield can be fully dismantled in seconds without the need for tools. The drip tray underneath the SmartGrid weighing pan captures any spilled substances for safe disposal. All parts are dishwasher proof for easy and thorough cleaning.



# Open Up New Possibilities With a Wide Range of Accessories

**METTLER TOLEDO Excellence Balances can be individualized with accessories to meet the requirements of virtually any application. Our carefully designed accessories make your work easier, reducing fatigue as well as increasing accuracy and productivity. With more than 200 accessories available, the only question is: Which accessories could open up new opportunities for you?**

## RFID Solutions



SmartSample™ RFID tags on your titration beakers allow titration sample information entered at the balance to be securely transferred to your METTLER TOLEDO Titration Autosampler. EasyScan™ checks testing and calibration dates on RFID tagged pipettes. The built-in balance application guides you through the pipette testing process.

## Automated Dispensing



To achieve the highest level of safety and accuracy in handling and preparing samples, balances can be upgraded with Quantos automated solid and solvent dispensing modules via the Quantos Workflow Box. Gravimetric sample preparation eliminates variability and errors and complies with USP 841.

## ErgoClips



One step dosing directly into the tare container eliminates transfer errors and saves money by minimizing sample loss. Even unusual shaped containers are held securely in place. In combination with the MinWeigh Door™ accessory, ErgoClips help you achieve the lowest possible minimum weight.



### SmartPrep



The single use SmartPrep™ weighing funnel is made from antistatic material and is intended for the simple and safe weighing-in of powders. The unique design allows easy-access dosing and enables powders to be effectively rinsed off into your desired flask, thus minimizing sample loss.

### Printers



Avoid transcription errors with printouts that conform to all GxP quality standards and provide full traceability. Sample labels with barcodes can also be printed directly from your balance. A Bluetooth® printer placed outside sensitive areas prevents contamination of the printer and the printouts.

### CarePacs



CarePacs® contain just what you need to test your balances in accordance with USP 41 – two test weights corresponding to 5% and 100% of the capacity of your balance. Tweezers, gloves and other accessories are included for professional weight handling.

For more information, visit our website or request our Accessory Catalog.

► [www.mt.com/xse-analytical](http://www.mt.com/xse-analytical)

# Excellence Balances

## Meet Your Individual Needs

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### Excellence XPE

XPE Balances provide outstanding performance in analytical weighing and support the highest requirements for safety, efficiency and ease of compliance. Enjoy unlimited weighing possibilities for years to come.




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### Excellence XSE

With excellent weighing performance and ergonomics as well as quality assurance features, XSE Balances are the perfect workhorse solution for a multitude of workplaces.



	High Resolution Technology	proFACT Advanced	StaticDetect	Lowest Minimum	Internal Adjustment	Large Temperature Weight	SmartGrid Touchscreen Control	ErgoClip Hanging	SmartTrac Weighing Pan	Easy Cleaning	Automatic Draft Shield Doors	StatusLight	Graphical LevelGuide	TestManager Embedded Software	MinWeigh Function	FACT and GWP History	proFACT Advanced Software	Password Protection	Admin History	User Management	Lab Ready	Calibry Ready	EasyScan Ready	SmartSample ready (RFID Pipette)	New Compact ready (RFID Titrator)	Quantos Upgrade Ready
<b>XPE</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>XSE</b>	✓	✓				✓	✓	✓	✓			✓	✓	✓	✓	✓				✓	✓	✓	✓	✓		
	<b>Accurate Results</b>				<b>Efficient Operation</b>						<b>Quality Assurance</b>						<b>Seamless Process</b>									

### Functionality by model

Select the balance model according to your needs of accurate results, efficient operation, quality assurance and seamless process.

#### XPE

	<b>XPE105</b>	<b>XPE205</b>	<b>XPE205DR</b>	<b>XPE204</b>	<b>XPE504</b>
Maximum Capacity	120 g	220 g	220 g	220 g	520 g
Readability Full range	0.01 mg	0.01 mg	0.1 mg	0.1 mg	0.1 mg
Readability Fine range			0.01 mg		
Repeatability (typical, 5% load)	0.007 mg	0.007 mg	0.007 mg	0.04 mg	0.04 mg
Settling Time	2.5 s	2.5 s	1.5 s / 2.5 s	1.5 s	1.5 s
Minimum Weight (1%, k = 2, 5% load)	1.4 mg	1.4 mg	1.4 mg / 8 mg	8 mg	8 mg
USP Minimum Weight (0.10%, k = 2, 5% load)	14 mg	14 mg	14 mg / 80 mg	80 mg	80 mg

#### XSE

	<b>XSE105DU</b>	<b>XSE205DU</b>	<b>XSE104</b>	<b>XSE204</b>
Maximum Capacity	120 g	220 g	220 g	220 g
Readability Full range	0.1 mg	0.1 mg	0.1 mg	0.1 mg
Readability Fine range	0.01 mg	0.01 mg		
Repeatability (typical, 5% load)	0.01 mg	0.01 mg	0.04 mg	0.04 mg
Settling Time	1.5 s	1.5 s	1.5 s	1.5 s
Minimum Weight (1%, k = 2, 5% load)	2 mg / 8 mg	2 mg / 8 mg	8 mg	8 mg
USP Minimum Weight (0.10%, k = 2, 5% load)	20 mg / 80 mg	20 mg / 80 mg	80 mg	80 mg

# METTLER TOLEDO Services

## Ensure Consistently Reliable Results

From selecting the right balance to suit your needs through to daily operation in your lab, the METTLER TOLEDO Sales & Service Team can accompany you every step of the way. Our expertise means you can enjoy excellent performance, maximum uptime and full compliance with the norms and standards relevant to your industry.



### Good Weighing Practice™

METTLER TOLEDO developed GWP® (Good Weighing Practice™) as a standardized scientific methodology for the secure selection, operation and calibration of weighing equipment. GWP® is applicable to all weighing equipment from any manufacturer.

### Evaluation and Selection



Our GWP® Recommendation service helps you select the right balance according to your specific process and quality requirements. Documentary evidence is provided to show that the selected balance meets metrological, environmental and regulatory requirements.



**Global Reach – Local Presence!**

A team of 5,000 specialists represent METTLER TOLEDO Sales and Service in more than 140 countries worldwide.

**Installation**



We document the installation and qualification of your balance in accordance with the relevant industry regulations. Operator training right after installation leads to improved productivity.

**Calibration**



Balance calibration is at the core of accurate weighing results. Each calibration certificate declares the balance's minimum weight and measurement uncertainty – essential information for reliable weighing processes.

**Routine Operation**



GWP® Verification provides clear guidance for performance verification of your balance to save you time and money. Included is an optimal routine testing and calibration schedule, specifications of the required test weights, and the ideal maintenance plan.

# Benefit From Our Weighing Expertise

With decades of experience in laboratory weighing, METTLER TOLEDO can offer you a wide range of online learning resources. Make the most of our expertise to enhance your weighing know-how and ensure you benefit from all the power that your analytical balance offers. Check out the documentation on our internet page for a range of relevant materials.



## Videos

In an easy learning format, our videos demonstrate the use of our balances and inform you about our weighing solutions. For example:

- Antistatic Solutions
- Easy Cleaning
- ErgoClips

► [www.mt.com/green-light](http://www.mt.com/green-light)



## White Papers

Our scientific white papers contain a wealth of information on a range of different topics such as:

- GWP – Science Based Weighing
- Balance Safety Features
- Antistatic Technology
- Data Integrity

► [www.mt.com/green-light](http://www.mt.com/green-light)



## On-demand Webinars

Learn directly from our weighing experts and guest speakers. It's easy to register.

For starters, we recommend

- Minimizing Out-of-Specification Errors
- Good Weighing Practice

► [www.mt.com/webinars](http://www.mt.com/webinars)

[www.mt.com/analytical-balances](http://www.mt.com/analytical-balances)

For more information

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Printed in Switzerland 30094793  
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