# Excellence Line



# **Analytical Balances**

Easy Balance Management Electrostatic Solutions Full Process Control



# **Worry-free Weighing**

Follow the Green Light



# **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

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and and

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METTLER TOLEDO

# 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<sup>™</sup> 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

# **Guided Testing**

# **Always Level**



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.



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



The new LevelGuide<sup>™</sup> 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**

## **Eliminating Charges**

Antistatic ErgoClip



Our StaticDetect<sup>™</sup> 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.



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.



The ErgoClip<sup>™</sup> 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 fullfill the highest process security requirements and supports you in your steps towards establishing a paperless lab.

# Full SOP User Guidance

Safe Data Exchange and Storage

**Go Paperless** 



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.



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.



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 5845



#### 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<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> checks testing and calibration dates on RFID tagged pipettes. The built-in balance application guides you through the pipette testing process.

# **Automated Dispensing**

## ErgoClips



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.

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<sup>™</sup> weighing funnel is made from antistatic material and is intended for the simple and safe weighingin 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<sup>®</sup> 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.

# **Excellence Balances** Meet Your Individual Needs

# **Excellence XPE**

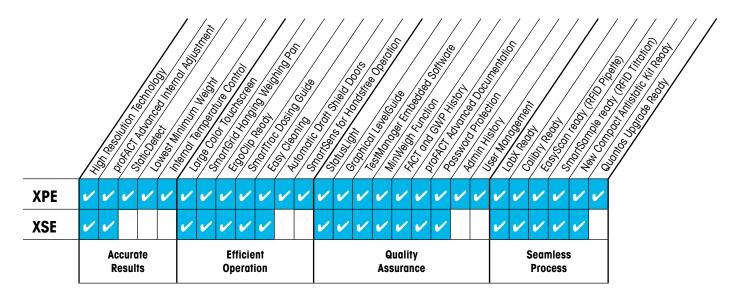
XPE Balances provide outstanding performance in analytical weighing and support the highest requirements for safety, efficiency and ease of compliance. Enjoy unlimited weighing possibilities for years to come.



## **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.





## Functionality by model

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

XPE					
	XPE105	XPE205	XPE205DR	XPE204	XPE504
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
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	1	1	1	1	
	XSE105DU	XSE205DU	XSE104	XSE204	
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	
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<sup>®</sup> (Good Weighing Practice<sup>™</sup>) as a standardized scientific methodology for the secure selection, operation and calibration of weighing equipment. GWP<sup>®</sup> 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.



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



#### White Papers

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

- $\bullet$  GWP Science Based Weighing
- Balance Safety Features
- Antistatic Technology
- Data Integrity

www.mt.com/green-light



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

# www.mt.com/analytical-balances

For more information



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