

Ensure Operational Reliability With Service XXL

Qualify your balances and work safely from day one. METTLER TOLEDO offers customized solutions for working in regulated environments.

EQ-Pac – Conformity and efficiency inclusive

The complete Equipment Qualification solution offers you all relevant IQ/PQ/MQ processes, the associated services and the necessary documentation.

IPac – to ensure qualified installation

Ready for immediate use– IPac offers you a professional installation and initial qualification. IPacs are ideal for integrating the weighing unit into an existing quality management system.

XXL Service – more than just service

METTLER TOLEDO offers custom services for day-to-day operational reliability to maintain the value and ensure fault-free operation of your weighing unit. Our global service network offers you cost-effective service solutions.

Pipette Calibration



Pipette Calibration Solutions

Efficient

Ergonomic

Facilitates compliance

www.mt.com

For more information

Accurate Pipettes Day by Day



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GWP®
Good Weighing Practice™

The internationally recognized GWP® guideline reduces weighing risks and helps to:

- identify the correct balance for the weighing task
- reduce costs by optimizing testing procedures
- ensure compliance with regulations

www.mt.com/GWP

METTLER TOLEDO

Individual Solutions from Pipette Testing to Calibration Services

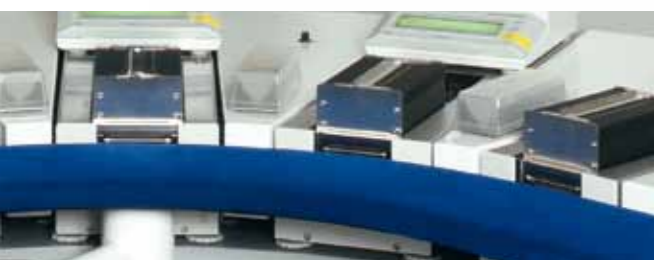
The accuracy of a pipette plays a critical part in your application. METTLER TOLEDO offers you gravimetric solutions for occasional performance testing up to professional pipette calibration. We support you in finding the right mix: from self made pipette testing with professional service support to professional pipette calibration stations.



Pipette Performance Testing



High Throughput Calibration Solutions



Calibration Services



Pipettes within Specifications

Reduce Risks with Performance Tests

Ensuring that your pipettes perform within tolerances in your daily work is the economical way to reduce risks: Monitor the accuracy of your pipettes with regular pipette performance testing and pipette calibration to ensure data integrity.

Gravimetric testing is the recommended method for pipette performance testing according to ISO 8655. ISO 8655 specifies the readability and accuracy of a balance required in connection with the selected volume of the pipette under test.

| Selected volume of apparatus under test V* | Readability |
|---|-------------|
| $1 \mu\text{l} \leq V \leq 10 \mu\text{l}$ | 0.001 mg |
| $10 \mu\text{l} < V \leq 100 \mu\text{l}$ | 0.01 mg |
| $100 \mu\text{l} < V \leq 1000 \mu\text{l}$ | 0.1 mg |
| $1 \text{ ml} < V \leq 10 \text{ ml}$ | 0.1 mg |
| $10 \text{ ml} < V \leq 200 \text{ ml}$ | 1 mg |

* For practical purposes, the nominal volume may be used to choose the balance.

The perfect combination – the corresponding Evaporation Trap for each balance

In a professional testing approach Evaporation Traps are indispensable as they keep errors caused by evaporation to a minimum. For pipette performance testing simply mount the Evaporation Trap on your conventional balance and convert it into a pipette testing set-up.

Multipurpose pipette performance testing

The round glass Evaporation Trap fits onto all XP/XS Balances and allows pipette calibration down to a dispensed volume of 10 μl which covers most of the pipettes in your lab. In addition, the glass material reduces static effects.



Pipette performance testing in the microrange

Mount the robust steel trap on the Balance models XP26/56. Test pipette calibration down to a dispensed volume of 1 μl . The readability of 1 μg allows reproducible measurements.



Large volume pipette performance testing

The convenient and large Evaporation Trap fits to the portable Balances WXS/WXT. It allows uninterrupted pipetting for high-volume pipettes up to 10 ml. The minimum dispensed volume is 10 μl .



Safe in the case

For protection and easy storage the Evaporation Traps are delivered in a case.



Boost the Productivity of Your Pipette Calibration Service

Fulfill all requirements while speeding up your calibration process: METTLER TOLEDO offers you efficient, compact and ergonomic solutions for single- and multi-channel pipette calibration. These solutions increase productivity and cost effectiveness of your calibration service and bring impressive return on investment.



Offering optimum speed and ergonomics: The XP26PC operated on the weighing table.

Single channel pipette calibration at high speed
Pipette calibration with the XP26PC Microbalance is up to 3 times faster compared to a conventional balance. Its door opens automatically when the pipette passes through the light barrier. The XP26PC weighs smallest pipette volumes down to 1 µl.



Automated single- and multi-channel pipette calibration – convenient cost effectiveness
Check your multi-channel pipettes with a dispensed volume down to 10 µl at a time in a single step with the MCP System – generating reliable results and giving full traceability.



The MCP1-S system, delivered in a transport case, is ideal for on-site calibration.



The liquid-containers are transported automatically and placed on the weighing pan individually.

Ergonomic Weighing Tables – designed to enhance your laboratory

METTLER TOLEDO professional weighing tables increase weighing speed and foster reliable weighing. The decoupling of the inner table from the work surface reduces vibrations and shortens the stabilization time of the balance. Improve work ergonomics with the adjustable table height and elbow cushions.



Calibry Calibration Software

Customizable and Compliant

Calibry supports all steps of the calibration process and ensures full traceability of calibration data. RFID capabilities enable complete company-wide pipette management. The software saves all calibration data in a secure database and ensures compliance with ISO 8655 and FDA 21 CFR Part 11. Comprehensive reports provide full details of every calibration.

Reliable Pipette Monitoring

Calibry writes pipette and calibration information directly on the RFID tag. Using a scanner, pipette identification is 100% reliable and quickly provides the full calibration status.

Innovative Method Management

Calibry provides a complete overview of all methods. The methods can be easily customized and assigned to a group of selected pipettes.

Quick Access Window

Simply scan the pipette and all important information is visible at a glance: serial number, assigned method, reports and dates for the "Next Calibration" and "Quick Check" etc.



Pipette Calibration Service

Focused on Details

As one of the most respected manufacturers and suppliers of balance technology in the world, there is no one better equipped to also maintain the reliability of your pipettes. METTLER TOLEDO provides service support and performance verification of pipettes, either at your site or at one of our pipette calibration centers. Have a look at the options made available to you: they are affordable, fast and convenient.

PM

Preventive Maintenance (PM)

The fastest and most cost effective way for high pipette reliability.

On-site functional and leak testing, replacement of worn parts, and thorough cleaning eliminate 95% of possible problems before they even occur.

Basic

Calibration (Cal.)

The most economic way to test to specifications.

Functional testing and gravimetric evaluation to manufacturer or ISO 8655 specifications including documentation and accredited calibration certificates.

Standard

(PM + Cal) and precision

For maximum pipette reliability, accuracy.

Gravimetric testing to manufacturer or ISO specifications, combined with functional and leak testing, replacement of worn parts, and thorough cleaning ensure best performance all around. Scheduled, in a controlled environment, and including documentation and ISO accredited calibration certificates.

Advanced

(PM + Cal + GxP)

For optimal pipette performance and GMP/GLP compliance.

Comprehensive and tailored calibration, maintenance, and documentation service plans, designed to meet the most stringent regulatory requirements. Including all necessary testing, certificates, documentation, and further consulting.

RAININ products enhance the performance of laboratories by improving experiment accuracy and repeatability. RAININ offers the broadest selection of hand-friendly pipettes, bioclean tips, and related services, designed to work as an efficient integral system.



Pipettes with RFID

Rainin Pipet-Lite XLS is the world's first pipette equipped with a built-in electronic RFID tag for storing information. Each pipette is quickly and reliably identified and carries information such as "Next Calibration" and "Quick Check Dates".

Tips

RAININ high-grade bioclean tips offer innovative design and high quality production. Manufactured under clean-room conditions, these flawless tips are 100% contamination-free, preventing experiment inconsistencies and failures.

Evaporation Traps



| Trap / Balance | XP/XS/XA | WXT/WXS/SAG | MCP System | AX/AT |
|--------------------|------------------------------------|---------------|------------|--|
| Balance resolution | XP/XS Analytical: 0.1 / 0.01 mg | 0.1 / 0.01 mg | 0.01 mg | AX/AT Analytical: 0.1 / 0.01 mg AX26: 0.001mg |
| Trap Capacity | 6 / 20 ml | 6 / 20 ml | 6 / 20 ml | 6 / 20 ml |
| Trap order number | 11140043 | 11138010 | 11138006 | 11140042 (for AX26 capacity of 6 ml only) |



| Trap / Balance | XP56/26 | WXT/WXS/SAG | MCP System | XP/XS/XA |
|--------------------|----------|---------------|------------|---------------|
| Balance resolution | 0.001mg | 0.1 / 0.01 mg | 0.01 mg | 0.1 / 0.01 mg |
| Trap Capacity | 10 ml | 100 ml | 100 ml | 100 ml |
| Trap order number | 11140041 | 11138009 | 11138008 | 11138440 |

Calibry Calibration Software

| System | Calibry | | |
|---|---------------------------|---|-----------------------------|
| | Calibry Light 11138423 | Calibry Single Workstation 11138419 | Calibry Network 11138420 |
| Supporting Analytical or Precision Balances: XP26PC, XP, XS, XA, AX, SAG, AG, WXT, AT | • | • | • |
| Connection of up to 16 balances at 1 PC workstation | • | • | • |
| Calibration of single and multi-channel pipettes with MCP system | | • | • |
| Support of more than 2000 calibrations / year (recommendation) | | • | • |
| Support of SQL Server® database | • | • | • |
| Networkable system (installation on several PCs of the network accessing the same database) | | | • |
| Adherence to 21 CFR Part 11, incl. password protection (Windows based), user management, audit trail, automatic workstation lock. | • | • | • |



Key features

- Full adherence to ISO 8655 (tolerances, method, report)
- Built-in database of ISO and manufacturers' pipette calibration specs for over 2500 pipettes
- Company-wide RFID Pipette Management system
- Calibration scheduler with Tasks List
- Correction for environmental parameters
- Automatic evaluation of calibration results with pass or fail tag
- Complete calibration history for all pipettes
- Support of physical inspection and corrective actions
- Advanced options of customization, e.g. calculation of the Z factor thanks to an equation editor
- Report generator: preview, design and modify functions included
- Export of customizable reports in MS-Word® and Excel

Optional

| | |
|-------------------------|----------|
| RFID Reader | 17011964 |
| RFID Power User License | 30007309 |
| Validation Handbook | 11780959 |

High-speed System for Micro Pipette Calibration



Excellence Plus XP26PC

Standard equipment

- Removable light barrier for right or left hand use
- Evaporation Trap, with a 10 ml container
- Single-channel pump
- Calibration Kit (including 1 g OIML-certified weight, a pair of tweezers, special weighing pan and certificate)
- LevelControl warns you when the balance is not leveled
- BalanceCheck prompts automatically for validation with external weights
- proFACT fully automatic time- and / or temperature-controlled internal adjustment and linearization
- Built-in RS232 interface and two auxiliary outlets
- Slot for second interface (7 options), incl. Bluetooth and Ethernet
- Production certificate

| Specifications | XP26PC |
|--|-----------------|
| Maximum capacity | 22 g |
| Readability | 0.001 mg |
| Measurement standard uncertainty | 0.0015 mg |
| Minimum dispensed volume (acc. to ISO8655) | 1 µl |
| Evaporation Trap | built in |
| Settling time | 3.5 s |
| Dimensions (L x W x H), mm | 487 x 263 x 296 |
| Weight | 11 kg |

| Ordering information and Accessories XP26PC | Order Number |
|---|--------------|
| XP26PC | 11106021 |
| ErgoSens external sensor for hands-free operation | 11132601 |
| Foot-operated switch for balance functions | 11106741 |
| RS9-RS9 (m/f) cable, 1 m | 11101051 |
| USB-232 converter cable | 11103691 |

Multi-channel Pipette Calibration System



MCP1-S

Standard equipment

- Single-channel set with 20 ml evaporation trap
- Multi-channel set for up to 12 channels
- Calibration set
- Carrying case
- One channel exhaust pump
- Reservoir for collecting the test fluid
- Single-channel pump

| Specifications | MCP1-S |
|--|-----------------|
| Number of channels | up to 12 |
| Container Volume (with fill level warning) | 16 ml |
| Readability | 0.01 mg |
| Maximum capacity | 101 g |
| Repeatability (s) | 0.02 mg |
| Stabilisation time (typical) | 5 s |
| Dimensions of analysis device and motor control* | 220 x 177 x 91 |
| Dimensions of measuring unit* | 296 x 171 x 164 |
| Weight | 8 kg |
| Weight including carrying case and accessories | 15 kg |

* L x W x H

| Ordering information and Accessories MCP System | Order Number |
|--|--------------|
| MCP1-S | 11138007 |
| 4-channel exhaust pump | 11138252 |
| One channel Kit with 20 ml Evaporation Trap | 11138006 |
| One channel Kit with 100 ml Evaporation Trap | 11138008 |
| Calibration Set including 20g E2 weight with certificate, weighing pan, draught shield, tweezers | 11138254 |

Weighing Tables



| | Weighing Table XP26PC | Weighing Table MCP2 | Weighing Table MCP5 |
|---------------------------------------|-----------------------|-----------------------|-----------------------|
| Order number | 11138041 | 11138040 | 11138043 |
| Outer table dimensions (WxDxH) | 760 x 803 x 784 mm | 760 x 803 x 784 mm | 1380 x 1380 x 784 mm |
| Height adjustment range (outer table) | 718 - 820 mm | 718 - 820 mm | 718 - 820 mm |
| Weight | approx. 130 kg | approx. 130 kg | approx. 200 kg |
| Configuration | Outer and inner table | Outer and inner table | Outer and inner table |
| Monitor base | | Monitor base | |
| Power supply shelf | | Power supply shelf | Power supply shelf |
| Elbow cushion (narrow) 2x | | Elbow cushion (wide) | Elbow cushion |
| Keyboard and mouse | | Keyboard and mouse | Keyboard and mouse |