

# Pipette Check



## Pipette Check Solutions

Minimum effort

Pipette Management

Sustainable results

## Checking Pipettes for Reliable Pipette Results

METTLER TOLEDO

# Pipette Check

## for Results That You Can Trust

**Whether your objective is to be first to publish or first to market, the accuracy and repeatability of your experiments is critical to your success**

Pipettes must deliver reliable results every time you use them, first time. Final results and decisions are directly related where most analyses start: Pipetting.

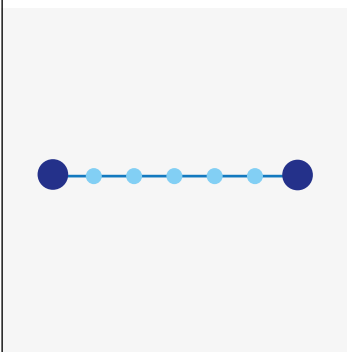
METTLER TOLEDO's unmatched expertise and reputation offers you guidance and unique comprehensive solutions to assure that you can rely on your valuable pipette results anytime.



Three main factors ensure that your pipette delivers reliable results every day:

- Pipette performance checks
- Pipette asset management
- Service & Calibration

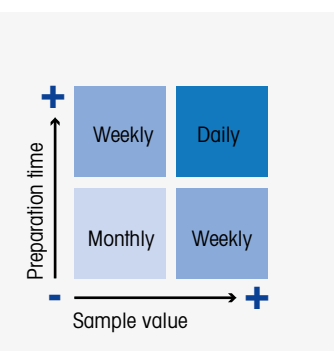
### Gain trust, reduce risk



A regular check of your pipette will uncover a malfunction earlier than having a surprise at the next calibration service.



### How often?



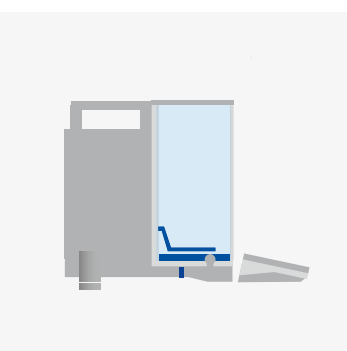
The more effort and valuable your samples are, the more often you shall check to avoid costly expenses and time.

### Which method?

ISO	↑	10x @ 10,50,100%
SOP		4x @ 10,100%
n/a		4x @ 100%

A pipette is checked at least at 100% and at more volumes when other guidelines are applied.

### What equipment ?



METTLER TOLEDO offers several dedicated packages perfectly fitted to your needs and for every budget. See page 10 & 11 for all solutions.

# Correct Pipette Checking with Minimum Effort

**Periodically assessing whether or not your pipettes are performing within tolerances is an excellent way to ensure data integrity and reduce your overall risk.**

Checking your pipette comes down to two major factors: the correct handling and usage of the right equipment, to make the correct decision if a pipette can still be used or not.

You can turn a conventional balance into a pipette check station by simply mounting an evaporation trap onto the weighing pan. The XPE onboard application or standalone Calibry software guide users through the testing procedure and record each pipette's test dates and results.

## The correct technique



Correct checking starts with the correct pipette technique to obtain reproducible results first time. Our expertise helps you to know all important details.

See Page 12

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

## Reduce evaporation



Evaporation traps are key to achieve reproducible results. Our traps are ready to use within seconds and can hold up to 100ml for many measurements even with large pipette volumes.

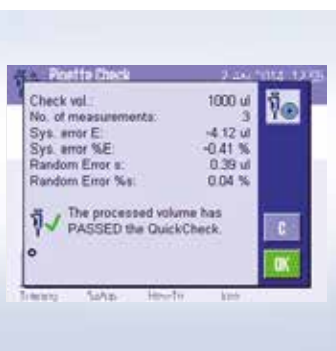
## Secure tracking



With an RFID tagged pipette, the check is automatically initiated. The tag contains the pipette data, check interval and method. When a check is passed the next date is stored on the pipette.



### Correct calculations



The XPE balance comes standard with an easy to use step-by-step guidance. Based on ISO 8655 it calculates all results automatically and shows Pass/Fail decisions.

### Up-to-date pipettes



RFID tagged pipettes are automatically updated using the XPE balance with an EasyScan RFID reader/writer.

- Easy to comply SOP's
- Next check date is written on the RFID sticker tag or RAININ pipette
- Pipette is always up-to-date

### Manage check data



Calibry Express software offers the best solution when using a dedicated pipette checking station. It can store all pipettes in a database and collect all testing results in reports.

# Smart Pipette Management

## Never Miss a Check Date

**Managing all pipettes through-out several laboratories is a challenging task and it easily happens that pipettes miss a check date, are overdue for service or can't be located.**

With SmartStand every RFID in Rainin XLS and XLS+ pipettes can be read out and instantly displays the check, service and calibration status. Several SmartStands can be connected to EasyDirect software to create a laboratory wide pipette asset management and location system.

### Reduce costs



Avoid costly efforts and retry's with pipettes that are out-of-specification or beyond check or service date and are not guideline compliant.

### Status at a glance



SmartStand displays the check, calibration and service dates that can be stored on every Rainin XLS pipette.

### Schedule pipette checks



Use Easy-Direct to set up pipette checks for specific pipettes or your entire inventory and SmartStand will alert users when pipettes are due for checks.



### Quick Check for all



EasyDirect can create RFID MethodCards that let you do guided checks quickly for any pipette without an RFID tag.

### Manage multiple labs



EasyDirect as server set-up can be linked to SmartStands in different labs to monitor pipette usage and location remotely. When pipettes return from service, SmartStand automatically updates the EasyDirect database with new service dates.

### Optimize your service



Better align your lab's workload and deadlines. EasyDirect allows you to assign different service plans (e.g., calibration vs. preventive maintenance) to each pipette and gives you more control over pipette uptime.

# Calibrate Pipettes for Sustainable Results

**Like all precision instruments, pipettes require regular maintenance and calibration in order to perform at their best.**

As the world's largest pipette service provider, METTLER TOLEDO maintains a global network of ISO 17025-accredited labs equipped with state-of-the-art precision microbalances, certified service experts and sophisticated systems for temperature, humidity and vibration control.

A regular program of service and calibration is a proven way to minimize risk and assure sustainable performance over lifetime. Your METTLER TOLEDO sales representative can suggest a customized service program that is optimized for your unique applications and risk tolerance.

## ISO/IEC 17025 accredited



As the internationally recognized standard for calibration laboratories, ISO/IEC 17025 accreditation assures compliance with strict standards that include temperature, humidity and vibration controlled environments.

## OEM spare parts



METTLER TOLEDO service labs maintain extensive inventories of spare parts for nearly every brand and type of pipette. We take pride in using factory authorized parts, regardless of manufacturer.

## Certified pipette technicians



We have the industry's most comprehensive pipette technician training. Following original training and certification, technicians are continuously assured through proficiency tests.





### Secure calibration data



Sophisticated calibration software for full customer traceability of calibration data, which is stored in a secure database for ISO 8655 and allows regulation complaint reports.

### Precision instruments



METTLER TOLEDO is the leading manufacturer of balances and weighing systems. Our equipment allows every channel to be calibrated individually, yet simultaneously, in compliance with ISO 8655 guidelines.

### Controlled environment



A controlled laboratory environment is paramount to achieving accurate and precise calibration results. METTLER TOLEDO calibration labs have controlled temperature and humidity conditions.

# Pipette Check Solutions

## Tailored to Your Needs

**Whether you want to do a monthly Quick Check or you need a dedicated daily pipette check solution, with the SmartCheck kits you always find the correct solution.**

SmartCheck kits consists of a balance, an evaporation kit, (built-in) software and an RFID reader/writer and can be tailored to specific customer needs to minimize your checking efforts.



	<b>SmartCheck Kit Pro</b>	<b>SmartCheck Kit QC</b>	<b>SmartCheck Kit Entry</b>
Typical check interval	Daily	Weekly	Monthly
Pipette check set-up	Dedicated Check	Quick Check	Quick Check
Pipette check range	20 - 10'000 µl	20 - 2'000 µl	20 - 2'000 µl
Balance type	XPE205	XPE205DR	XS105
Evaporation trap*	Glass 20 ml & Metal 100 ml	SmartCheck 50 ml	SmartCheck 50 ml
Check Software	Calibry Express*	Built-in	-
Step-by-step Guidance	•	•	-
Results calculated	•	•	-
Check Method database	•	-	-
Pipette check schedule	•	-	-
Pipette database	•	-	-
RFID Reader/Writer supported**	•	•	-
RFID Rainin Pipettes compatible	•	•	-
RFID MethodCard compatible	•	•	-
RFID Tag stickers compatible	•	•	-
SmartStand Compatible	•	•	-
EasyDirect Software Compatible	•	•	-
Results report	in PC, A4 Print-out with PC	Strip print-out with P-56 Rue	-

\* options to be ordered separately with the balance. \*\* as from Calibry V6.0 or higher

### Analytical balances for checking



Model	XPE205	XPE205DR	XS105
Order no.	30087653	30087700	30132870
Typical Pipette Range*	20 - 10'000 µl	20 - 2'000 µl	20 - 2'000 µl
Weighing range	0 - 220 g	0 - 81 / 81 - 220 g	0 - 120 g
Readability	0.01 mg	0.01 mg / 0.1 mg	0.01 mg
Repeatability	0.015 mg	0.015 mg (fine range)	0.015 mg

### Evaporation traps



Model	Evaporation Trap 20 ml	SmartCheck Trap 50 ml	Evaporation Trap 100 ml
Order no.	11140043	30215436	11138440
Compatible with	XS / XPE Analytical balance	all balances Snap-on for XS / XPE	XS / XPE Analytical balance
Typical Pipette Range	20 - 1'000 µl	20 - 2'000 µl	1'000 - 10'000 ul
Volume	6 ml & 20 ml	50 ml	100 ml
Material	Glass	Aluminum / POM-esd	Aluminum

### RFID Solutions

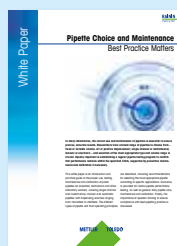


Model	RFID EasyScan Reader & Writer	RFID MethodCard	RFID MethodCard
Order no.	30078900 (XPE only) 30215407 (Flex Box)	30300929 (5 pcs) 30300930 (25 pcs)	30101517 (50 pcs) 30101518 (200 pcs)
Compatible with	XPE balance, RFID Rainin Pipette, RFID MethodCard, EasyDirect & Calibry Software**	RFID EasyScan connected to EasyDirect & Calibry Software or XPE Balance	Sticker Tag to put on any pipette
RFID range	LF / HF	HF	HF

### Pipette Data Management



Model	Calibry Express	SmartStand SCS	EasyDirect Pipette Asset Management
Order no.	11138423	30312897 (with BT) 30312898 (w/o BT)	30380079
Description	PC software solution to check pipettes regularly, store pipettes and check methods, generates A4 reports	RFID Pipette Charging Stand with status display, synchronize RFID pipettes with EasyDirect software, charging RAININ E-pipettes, software license included	Track and manage all pipettes, synchronizes with SmartStands, Schedule services, Export files. License included with SmartStand
System requirements	Windows 8 and 10	n/a	Windows 7 (SP1), 8 and 10
Connections	n/a	RFID (LF), USB and Bluetooth	n/a



### White Paper Pipette Choice and Maintenance:

#### Best Practice Matters

This white paper is an introduction and practical guide to the proper use, testing, maintenance and calibration of piston pipettes for scientists, technicians and other laboratory workers. The different pipette types and their operating principles are described, including recommendations for selecting the most appropriate pipette according to specific applications. Guidance is provided for pipette checks, daily care, maintenance and calibration.

# GPP - Good Pipette Practice

## Benefit from our Pipetting Expertise

You can improve the quality and consistency of the data your lab generates with Good Pipetting Practice – METTLER TOLEDO's comprehensive, systematic approach to maximizing pipetting accuracy and repeatability for good results and efficient working every day.



- Understand the array of liquid handling instruments and options available
- Know-how to optimize the workflow for each of the liquid handling steps involved
- Gain the range of pipetting skills necessary to produce reliable, reproducible data
- Appreciate how ergonomics can influence data production and their own well being



Boost the accuracy and reproducibility of your data by understanding workflow-related risks and how to mitigate them. Take five minutes to run through our GPP Risk Check and see where risks lie in your work and workflow

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



Rainin pipettes are comfortable to handle, have low force springs and "Magnetic Assist™" technology, to ensure light and smooth operation, while significantly reducing the risk of repetitive strain injuries. World's first pipette with RFID tag, the Pipet-Lite XLS+ supports quick checking and asset management.

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

[www.mt.com/pipcheck](http://www.mt.com/pipcheck)

For more Information

**Mettler-Toledo Group**  
Laboratory  
[www.mt.com/contact](http://www.mt.com/contact)

Subject to technical changes  
© 03/2017 METTLER TOLEDO. All rights  
30393616  
Global MarCom 1918 LB / PH