

Gravimetric Sample Preparation (GSP)

Automated Weighing



Weighing Liquids and Solids to Reach Perfect Concentrations

Do you spend a lot of time on sample preparation? Do you have to handle toxic or potent substances? Do you sometimes see out of specification results? Then read on...

"Quantos represents a significant advance in the preparation of solutions for quantitative analysis, in terms of accuracy and greater flexibility. The use of fully gravimetric techniques, for both solute and solvent, takes advantage of the greater accuracy and precision of modern analytical balances as compared to volumetric determination.

Although the pharmaceutical industry is regulated, both the FDA and USP (in General Notices Section 6.30) make allowances for advances in technology, such as this, which may result in 'alternate' methods, as long as they provide the same or increased assurance... of quality' (21 CFR 514.8). Therefore it can be assumed that gravimetric sample preparation is superior and in line with FDA and USP requirements."

Gregory P. Martin

President of Complectors Consulting
Chair of the USP Weights and Balances Expert Panel



Protection

for Users, Substance and Data

The use of potent and/or toxic substances is a risk to your own health and the people working around you. With Quantos GSP solutions you can significantly lower this risk. It goes beyond that: safer substance storage, automated documentation and data mangement are brought to the highest possible standard.



User and Substance Safety

Weighing chamber and dosing heads are sealed for user protection. The dosing heads, dedicated to a substance, are their lifetime container eliminating any cross contamination risk.

Impact resistant and sealed transport boxes prevent moisture from being absorbed and are very low temperature compatible for even greater protection.



Data and Process Safety

Benefit from the full traceability of the RFID technology. Save all relevant information on the RFID tag. Print matrix code, print protocol or use XML data. Removing human intervention automatically improves process safety.



Simple and Fast

Sample Preparation Made Easy

Sample preparation is crucial but is tedious and time consumming. With Quantos, you can spend less time on sample preparation, achieve better results, use your scientific expertise and speed up the entire lab organization.



Fast

Preparing a sample at the required concentration can be done in less than 2 minutes. Calculations and documentation are done automatically. No more need to clean and calibrate glassware, less dilution steps.



No textbooks

Dispense liquids and solids quickly and precisely at the touch of a button. Dispense powder from 1mg to several grams. Prepare concentrations starting from 0.01 mg/g (acc. to GxP) only. No need to receive extensive training, the instrument is self explanatory. An audit day is no longer a stressful day.



SavingsWorth its Weight in Gold

The Quantos technology is modular and available for all XP balances making weighing automation affordable, compact and simple. Reduce sample size and Out of Specification results (OOS).



Less OOS

Manual sample preparation can be held responsible for more than 60% of the costly Out of Specification results (OOS). Quantos helps reduce those errors and brings cost efficient and small footprint automation to the lab.



Downscaling

Quantos brings better results using just the substance quantity needed. Save up to 90% on solvent used. Quantos dispenses without spillage and you benefit from a lower MinWeigh. Using less substance per dose improves the substance efficiency.





Configuration

QA series

Product Feature

XP analytical balance combined with Quantos QLB for automated gravimetric addition of solvent to the right concentration.

- Integrated workflow guidance on the color touchscreen.
- Sample and diluent identification using RFID Technology.

Your benefit

- Accurate results independently of the accuracy of the manual weighing.
- Use of simple, cost efficient target vials.

Savings*

16%



Configuration

QB^P Series

Product Feature

Fast and safe weighing of powdery substances with down to 1 μ g readout accuracy

- Integrated workflow guidance on the color touchscreen.
- Sample identification using RFID Technology.

Your benefit

- Fatigue-proof, accurate powder weighing, up to 20 times faster than manually.
- The contamination risk is significantly reduced by avoiding spillage of powder.
- Yield increase of your valuable substance due to reduced MinWeigh

Savings*

54%



Configuration

QB^{PL} series

Product Feature

Automated sample preparation to an accurate target concentration.

- Integrated workflow guidance on the color touchscreen.
- Sample and diluent identification using RFID Technology.

Your benefit

- Semi-automated sample preparation process
- The contamination risk is significantly reduced by avoiding exposure to powder and solvent
- Yield increase of your valuable substance due to reduced MinWeigh

Savinas*

80%



Configuration

QX series

Product Feature

Fully automated sample preparation workstation

- 6 place balance
- Capping uncapping, barcode reading
- Your benefit
- Maximum accuracy and safety
- Night batch capacity

Savings*

96%

* based on the preparation of a reference standard, concentration of 0.5mg/g with a liquid dispensing module and balances having respective readout accuracies: 10, 10, 5.5, and 1µg.

Technology

Quantos uses the METTLER TOLEDO analytical balance technology to automate liquid and powder dispensing.

Whether it is on your bench or into your glovebox you can prepare a sample at the desired concentration within 2 minutes only.

AntiStatic Kit

Do you have diffcult powders to dose? The AntiStatic Kit immediately eliminates all unwanted electrostatic charges.

Safety enclosure QSE2

Laminar flow enclosure optimized for Quantos to guarantee increased protection from toxic substances

QuantosConnect application software

Used to draft worklists and also for data exchange with Quantos.



Safety enclosure QSE2 with 1-to-30 dosing system

Dosing heads

The Quantos dosing heads allow you to dispense powder in an instant. Each dosing head is filled with one substance. This makes time-consuming cleaning processes a thing of the past and also eliminates the risk of potential cross-contamination. Your valuable or sensitive substances are permanently and securely protected in the storage containers. The Quantos dosing heads employ a high-precision stirrer which provides a homogeneous powder flow, and a dosing pin which seals the head completely before and after each dosing.



Dosing without studying – the dosing head doses all free-flowing powders. Its algorithm learns the powder characteristics and registers deviations in the particle size.

Intelligent RFID* chip

Saves all substance-relevant data and thereby secures traceability.

* Radio frequency identification

Intelligent stirrer

Feeds powder continuously and homogeneously.

Quantos

Perfect Dosing

Automation through Quantos revolutionizes sample preparation.

Quantos is fast, secure and economical.

In creating Quantos, the weighing expertise of METTLER TOLEDO has been combined with intelligent dosing technology. This has led to a product with the typical METTLER TOLEDO characteristics:

Ease and convenience of use Innovation Quality

www.mt.com/q-gsp

For more information

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