

# Automated Dosing

**QUANTOS**  
Perfect Dosing



Automated Powder Dosing  
for Small Sample Sizes  
Fast, Safe and Economical

**Quantum Leap**  
in the Laboratory

**METTLER TOLEDO**







Intelligent heads dose automatically

**QUANTOS**  
from METTLER TOLEDO

# Spatulas were Yesterday

The first step in sample preparation for analytical methods, (such as HPLC), is precise and correct weighing of your substance using a spatula. This substance can be highly potent or harmful. A major challenge: the lab technician should fill the sample container with small quantities of substance without spilling and weigh correctly. Moreover, there is the danger of contamination, due to the formation of aerosols when repeatedly opening the substance storage container.

**Weighing with a spatula is a slow, uncertain and expensive process.**





**Dose intelligently instead of using spatulas!**

Thanks to high-precision engineering and intelligent electronics, QUANTOS dosing head and dosing instrument are perfectly matched.

# QUANTOS is Today

**From today the spatula is obsolete.**

METTLER TOLEDO revolutionizes your laboratory:  
QUANTOS – the quantum leap in the laboratory –  
automates dosing of small quantities of free-flowing  
substances.

QUANTOS doses to target weight without exceeding  
set tolerances.

## On your marks!



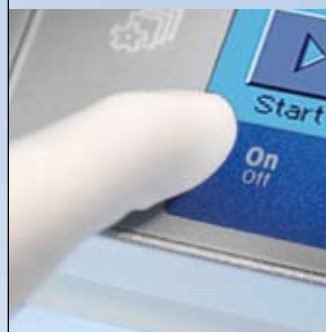
One click – and the dosing head with powder storage bottle is attached to the dosing instrument and ready to operate.

## Saved!



Radio frequency identification (RFID) in the dosing head saves all information, such as substance ID, quantity, date, etc.

## Go!



QUANTOS doses directly, precisely and automatically into different containers, at the touch of a button.



**On target:**



Even the most skillful hands never achieve this level of precision: QUANTOS doses to 0.5 mg – with 0.005 mg readout accuracy.

# A Highly Compact Unit With Unique Weighing Technology

**QUANTOS combines the revolutionary with the tried and tested:  
Automated dosing based on experience and precise weighing technology.**

The highly compact dosing instrument offers measuring performance of 220g to 0.005 mg readout accuracy; performance that is unique worldwide. This level of accuracy permits the typical minimum weight of 10 mg in accordance with USP.

The entire dosing process is controlled and monitored by the balance, ensuring that your dosing process is qualified to international standards. Call up a variety of dosing methods on the color display, in your language.

QUANTOS replaces the hours associated with manual weighing; operation is non-tiring and safe. Once the head is attached, you're free to concentrate on other things.

## Speed



Up to 20 times faster than manual processes: QUANTOS doses 1 mg to 250 mg in 15 to 60 seconds.

## Safety



QUANTOS protects you – hazardous substances remain sealed. Aerosol formation is kept to a minimum.

## Savings



Thanks to novel METTLER TOLEDO dosing technology lower substances quantities are required to achieve the same result.



Optimize your process with QUANTOS:  
 Reduce the sample quantity, protect the environment  
 and protect your employees.



**QB1 dosing instrument**

Maximum capacity	220g
Readability	0.005 mg
Typical minimum weight according to USP (0.1%)	10 mg
Typical minimum weight (1%, 2sd)	1 mg

# QUANTOS

## The Head with Substance

**The QUANTOS dosing head is unique:  
The integrated radio frequency identification chip (RFID) saves  
all information; data remains secure and traceable.**

Use the disposable dosing head to obtain an homogenous sample for a maximum of 75 doses, excluding the possibility of contamination. The unique stirring mechanism in the head continuously mixes the

particles, to obtain an homogenous sample.

With QUANTOS you dose the majority of your substances, quickly, safely and economically.

### All information is available



RFID saves all information (substance ID, quantity, date, etc.) – for 75 error-free, traceable doses. Call-up the information via the QB1 touch screen display.

### Unmistakable identification



Whether as a label with matrix code, sample protocol, or XML data, each value can be uniquely assigned.

### Impact-resistant and sealed



Thanks to the impact-resistant and sealed transport container each head – and thus your valuable substance – is completely protected. The transport container also prevents moisture from being absorbed.

### Storage



Turn over the QUANTOS transport container with the dosing head and place it in the storage cabinet. The sample falls back into the UV glass bottle and remains stable for a long time.



**Safely sealed**



After the dosing process the high-precision mechanism closes. When changing heads the danger of contamination is excluded.



**QH075B dosing head**

Number of dosing operations	75
Dosing repeatability	< 2% at 50mg
Capacity	16ml

# The Total Solution is Greater than the Sum of its Parts

**The service offering is part of the total QUANTOS solution:  
Only regular on-site inspection by the qualified and certified METTLER TOLEDO  
service organization guarantees safe results over the entire service life of the  
product.**

One of the main aims of QUANTOS is always to offer a complete solution for equipment qualification. Profit from all relevant processes IQ/OQ/ PQ/MQ and associated services in a total package, over the entire service life of the product.

Professional system qualification and full-protection service are included in the total QUANTOS package over the product's entire service life. You have security relative to compliance with dosing quantities, quality guidelines and customer requirements.

Reliability as well as compliance with various quality standards, such as ISO17025, ISO9001, IS10012 and GLP/GMP are optimally assured.



Scope of service integrated in QUANTOS:

### **QUANTOS EQ-Pac**

Reliability in monitoring inspection, measuring and test equipment

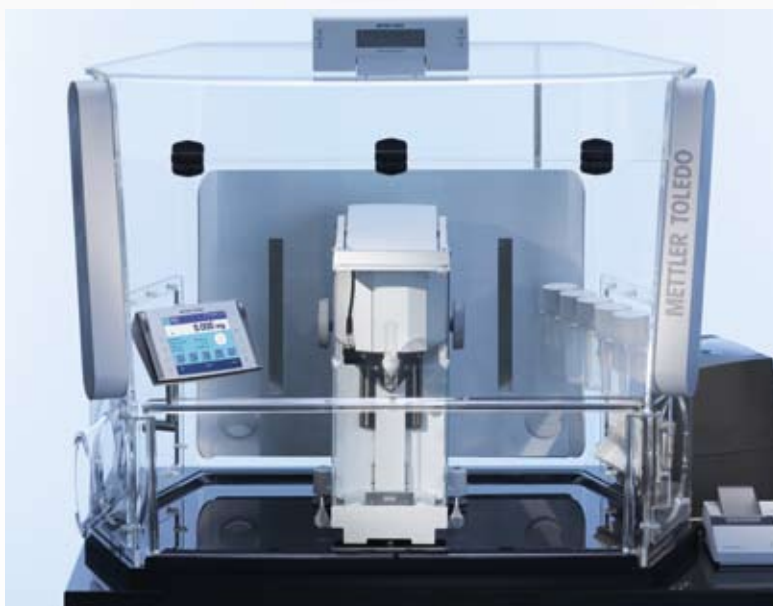
- Documentation for design qualification
- Production certificate
- Documented installation
- Initial calibration incl. documentation
- Installation and user training
- Detailed work steps for qualification
- Extensive SOPs for routine operation
- Specification of the activities for re-qualification
- Documentation of re-qualification activities

### **QUANTOS full-protection service**

Fixed costs that can be planned over the entire service life without financial risk

- Checking the basic settings
- Function-based cleaning
- Adjustment in accordance with manufacturer's guidelines
- Semi-annual function test
- Original spare parts
- Work time and travel time
- Update service and hotline service
- Calibration certificate 17025
- Minimum initial weight certificate

The QUANTOS complete service package is part of our total solution that guarantees conformity and process reliability at all times.



**Complete work station**

METTLER TOLEDO supplies the complete workstation for sample preparation. The ergonomically adapted safety cabinet offers all-around protection for QUANTOS. Sample labeling and data tracking included.

# QUANTOS Pays for Itself

With QUANTOS, dosing small substance quantities is up to 20 times faster. QUANTOS – the quantum leap in the laboratory – makes the spatula obsolete and at last eliminates tiring substance dosing. Work-force safety and substance contamination reaches a new level thanks to the unique QUANTOS automated powder dosing system. Return on your investment is realized within a short time.

<p>Automated Dosing</p>  <p><b>Service from A to Z</b> Conformity and process safety</p> 	<p><b>QUANTOS</b> Professional System installation 24x7 full service package</p>	<p>Automated Dosing</p>  <p><b>QUANTOS</b> is worth it</p> 	<p><b>QUANTOS</b> Professional System installation 24x7 full service package</p>
<p><b>QUANTOS Service</b> Brochure on the custom-tailored service offering for conformity and process reliability</p>	<p><b>QUANTOS product features and benefits</b> Brochure on ROI and technical data</p>		

## Get to know QUANTOS.

Our specialists would be pleased to meet with you at your location and demonstrate an optimal, tailored solution.

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

For more information

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