












# Physical Testing

# One Solution. For R&D / QC / IPC.

Actively managing your testing data saves costs and ensures regulatory compliance. Avoid error-prone manual transcription of test results and other time-consuming activities to consolidate test protocols. Depending on your data management requirements, SOTAX physical testing instruments can be operated stand-alone or networked – allowing you to flexibly choose your desired level of integration.

SOTAX drives innovation in physical testing since 1972 – from automatic end-point detection for disintegration tests to reliable tablet orientation during hardness tests. Designed for easy operation in demanding environments, SOTAX physical testing instruments incorporate robust Dr. Schleuniger® technology and excel with highest repeatability & precision.

Hardness	—p. 4
Disintegration	—p. 14
Friability	—p. 18
Tapped Density	—p. 20
Flowability	—p. 22
Cap Torque	—p. 24
Data Management	—p. 26
Contact	—p. 28

	Weight
	Thickness
	Width
	Diameter / Length
	Hardness
	Disintegration
	Friability
	Tapped Density
	Flowability
	Cap Torque
	Data Management



# MT50 — Manual Tablet Hardness Tester



sotax.com/MT50

FastTest™ thickness station for  
efficient multi-parameter measuring

Intuitive icon-based EasyTouch™  
control with user administration

SmartWay™ networking and data  
integrity management with q-doc®

Configurable test reports and various  
printer interfaces including export of  
test results to USB flash drive

5 parameters

Simple operation

Robust and precise  
up to 800 N

Dr. Schleuniger®  
technology

Electronic data  
management

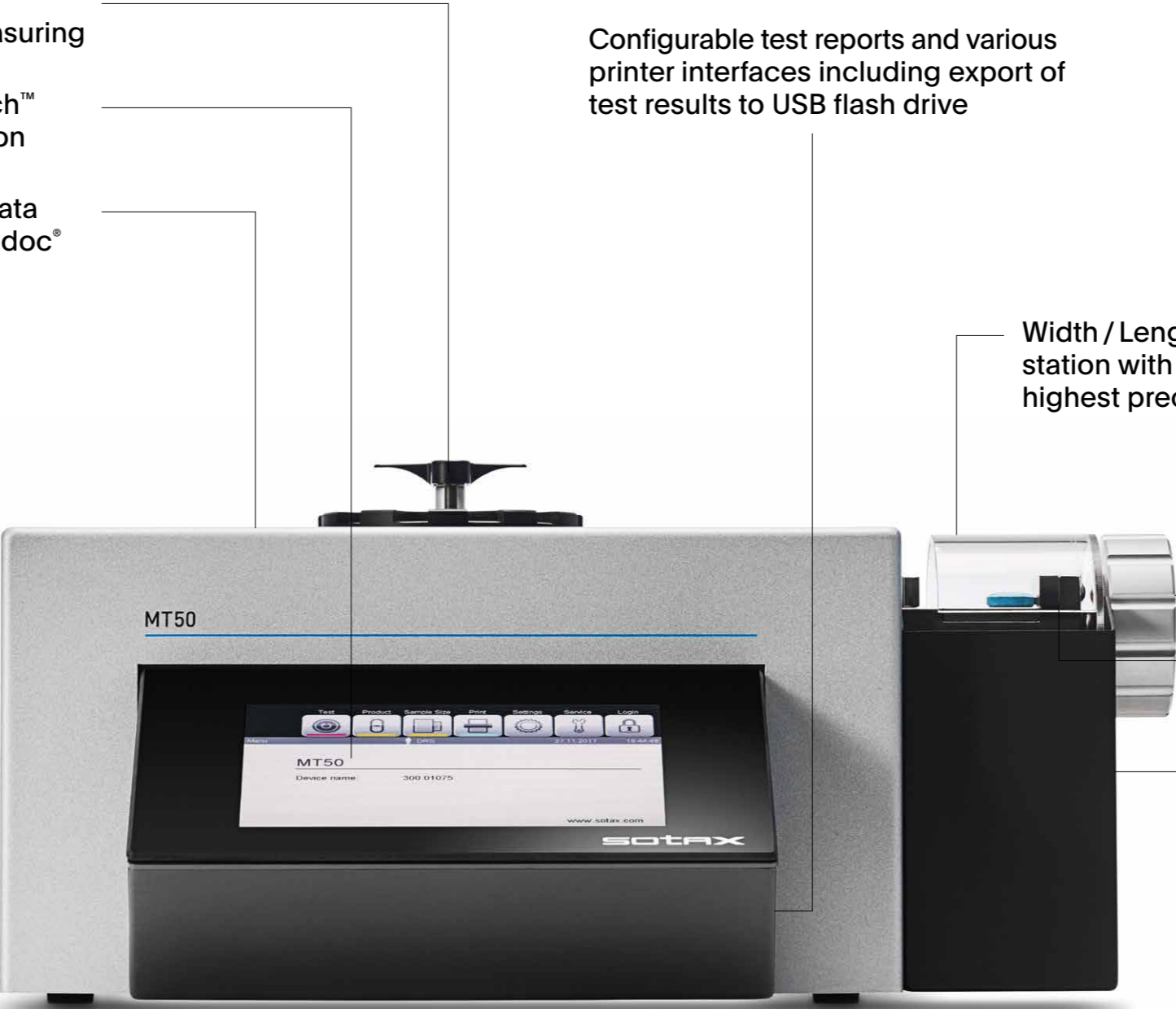
Recording of weight  
measurements from external  
analytical balance

Width / Length (Diameter) / Hardness  
station with optimized jaw movements for  
highest precision and short cycle times

SmartProtect™

Exchangeable tongues for  
easy tablet orientation

Debris collection bin





# ST50 — Semi-Automatic Tablet Testing System



sotax.com/ST50

5 parameters

Tablet orientation with  
SmartAlign™

Video monitoring

Fast and precise  
up to 800 N

Electronic data  
management

Width / Length (Diameter) /  
Hardness station with SmartAlign™

Thickness station with highly  
accurate linear sensing technology

Video monitoring for full traceability  
and simplified OOS investigations

Integrated weighing module  
or external analytical balance

High-precision calibration with  
static SmartCal™ weights or  
dynamic qualification with DQD™

Configurable test reports and various  
printer interfaces including export  
of test results to USB flash drive

23-position carousel  
(quick-change without any tools)

Anti-static safety cover

Intuitive icon-based EasyTouch™  
control with user administration

SmartWay™ networking and data  
integrity management with q-doc®





# AT50 — Automatic Tablet Testing System



sotax.com/AT50

Universal high-speed  
separator for reliable feeding  
of all shapes and sizes

Short cycle times with minimal  
distances between stations

Weight measuring station  
with fast “weight only” mode

Linear feeder prevents convex  
tablet shapes from rolling

High visibility and very easy  
cleaning of entire test area



For all your tablets

Fast testing of  
5 parameters

Small footprint

Online with your  
tablet press

Benchtop in R&D, QC,  
and IPC labs

Capsuled Width / Length (Diameter) /  
Hardness measuring station

Reliable orientation of all tablet shapes  
with AutoAlign™ and SmartAlign™

Thickness measuring with integrated  
TouchControl™ sensor

Networking with q-doc® data integrity  
management or online integration  
with your tablet press

# HT100 — Automatic Tablet Testing System



sotax.com/HT100

5 parameters

Tablet orientation with  
AutoAlign™

The Lab Specialist

Loading of 10 batches  
simultaneously

Electronic data  
management

AutoSeparator™ for fast & reliable  
feeding of single samples

Weight measuring station  
with fast "weight only" mode

Collection bin for not-tested  
samples

Networking and data  
management with q-doc®

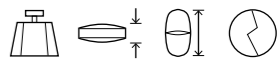
10-magazine feeder to load  
samples from different batches

Transport carousel and measuring  
stations for thickness, width,  
diameter / length, and hardness

AutoAlign™ for fast and reliable  
orientation of oblong & oval tablets

Debris collection bin





# AT4 — Automatic Tablet Testing System



- 4 parameters
- Ideal for demanding environments
- Very robust
- For IPC and online with tablet press
- Electronic data management

12-magazine feeder to load samples from different batches

Linear feeder to orient convex & rolling tablet shapes

Linear movements for tablet orientation with SmartRake™

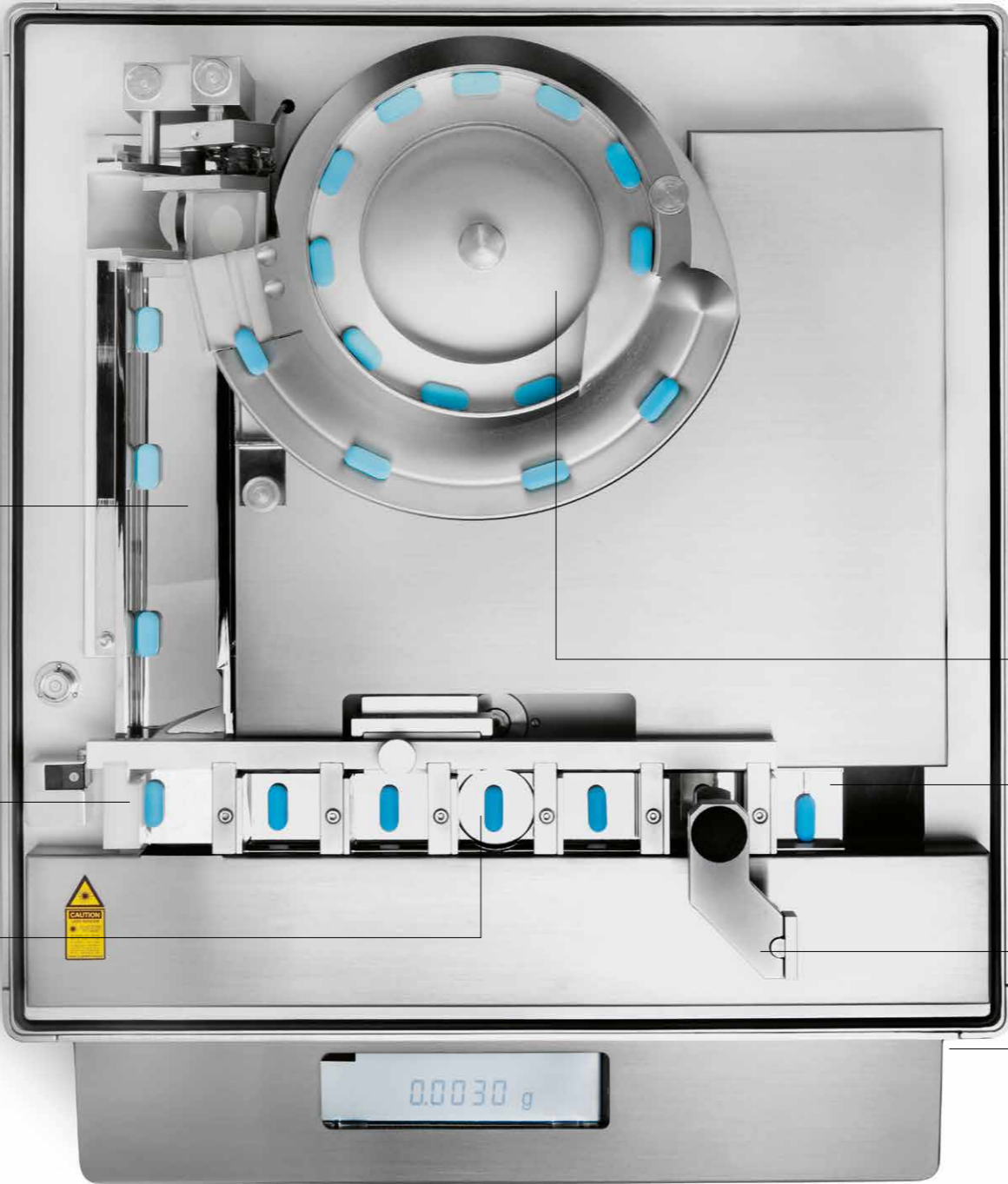
Integrated weighing module

Vibratory bowl feeder for all types of tablet shapes & sizes

Length (Diameter) / Hardness station with Dr. Schleuniger® technology

Thickness measuring station

Networking and data management with q-doc®





# DT50 — Automatic Disintegration Tester



sotax.com/DT50

User-friendly touch screen  
operation

Fully compliant wireless  
self-centering baskets

Automatic test start when  
target temperature has  
been reached

100 % unattended end-point  
detection for each tablet

Continuous monitoring of  
medium temperature

Bathless induction heating  
for very short heating times



Master Station

Modular additional stations



Client Station

100 % unattended  
end-point detection

Bathless

Automatic test start

Permanent medium  
temperature monitoring

Electronic data  
management

Preheating of media for  
seamless pH-changes



Media Preparation Station



# DT2 — Manual Disintegration Tester



sotax.com/DT2

Recording of individual disintegration  
times per sample or of a complete set

Powerful integrated heating  
system with sensor

Fully compliant manual baskets  
with unique quick-lock mechanism  
to prevent horizontal movement

Printing of test protocols

Method programming and  
alarm signal for pH change

Independent stations

Recording of individual  
end-points

Different test run modes

Precise temperature  
control

Printing of  
test protocols

Temperature probe can be  
attached to a basket for medium  
temperature monitoring

Two independent stations





# FT2 — Friability and Abrasion Tester



sotax.com/FT2

Calculation of percent friability /  
weight loss and printing of  
test protocols

Perform two friability / abrasion  
tests simultaneously

Programmable rotational  
speed / time

Menu-guided qualification  
procedure with printed report

Integrated 10° tilting  
mechanism as per USP

Collection tray for each drum



User-friendly SingleButton™  
navigation

Networking and data  
management with q-doc®

1 – 2 drums

Connect analytical  
balance

Print test protocols

Password protection

Electronic data  
management

Recording of weight readings  
from external analytical balance





# TD1 — Tapped Density Tester



sotax.com/TD1

- Suitable for different cylinder sizes / volumes
- Quick-change between different stroke heights for USP / Ph. Eur. methods 1 and 2

- Menu-guided qualification procedure with printed report
- Test protocols including Tapped Density, Compressibility Index, and Hausner Ratio
- Networking and data management with q-doc®



- User-friendly SingleButton™ navigation
- Recording of weight readings from external analytical balance



Two test methods in one instrument

—

USP, Ph. Eur., ASTM and DIN EN ISO compliant

—

Print test protocols

—

Password protection

—

Small footprint



# PF1 — Powder and Granulate Flowability Tester



sotax.com/PF1

## 3 different test setups

Flow through an orifice  
with Funnel or Cylinder

Mass per time or Volume  
per time

Angle of repose

Timer and balance

"Flow through an orifice" type tests  
with cylinder or funnel

Integrated timer starts and  
stops automatically when  
opening / closing the shutter

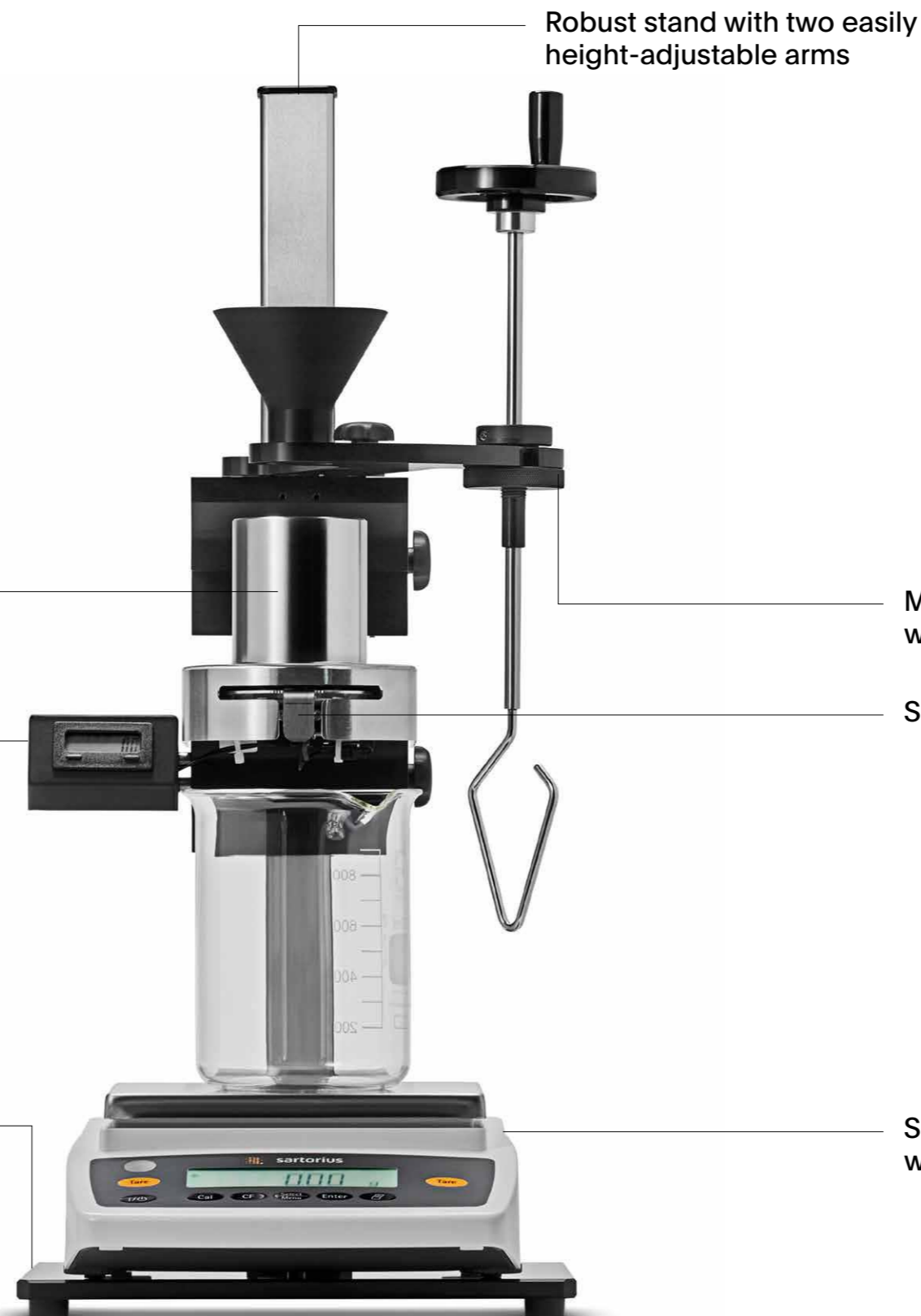
The base readily accepts an additional  
platform for standardized measuring of  
cone height for "Angle of Repose" tests

Robust stand with two easily  
height-adjustable arms

Multi-purpose pivot arm for test setup  
with stirrer and filling funnel

Shutter to open / close the orifice

Simplified "Mass per Time" measuring  
with laboratory balance





# TM200 — Cap Torque Tester



sotax.com/TM200

Motorized drive unit MDU2  
for repeatable open and close  
movements

Quick-change cap adapters,  
universal or custom-made to  
the specific shape of a cap

Universal self-centering  
bottle holder

Networking and data  
management with q-doc®



Setting of downward force  
for child-resistant bottle caps

Suited for small bottles  
to large jugs

Print test protocols  
and calibration reports

Calibration with traceable  
reference weights

Child-resistant closures

Open and close torque

Repeatable motorized  
movements

Calibration with traceable  
weights

Electronic data  
management



# q-doc<sup>®</sup> Data Management Software

Take full control of your data and manage all your methods, results, and users with q-doc<sup>®</sup>. Use the same method on different systems, consolidate data from multiple test runs in a single report, and avoid redundant management of users and their passwords. From electronic signatures, audit trail, and advanced user management to LDAP integration, batch comparison, and LIMS import / export functions – the q-doc<sup>®</sup> framework is designed for implementation of an efficient, fully 21 CFR Part 11 compliant system.



sotax.com/q-doc

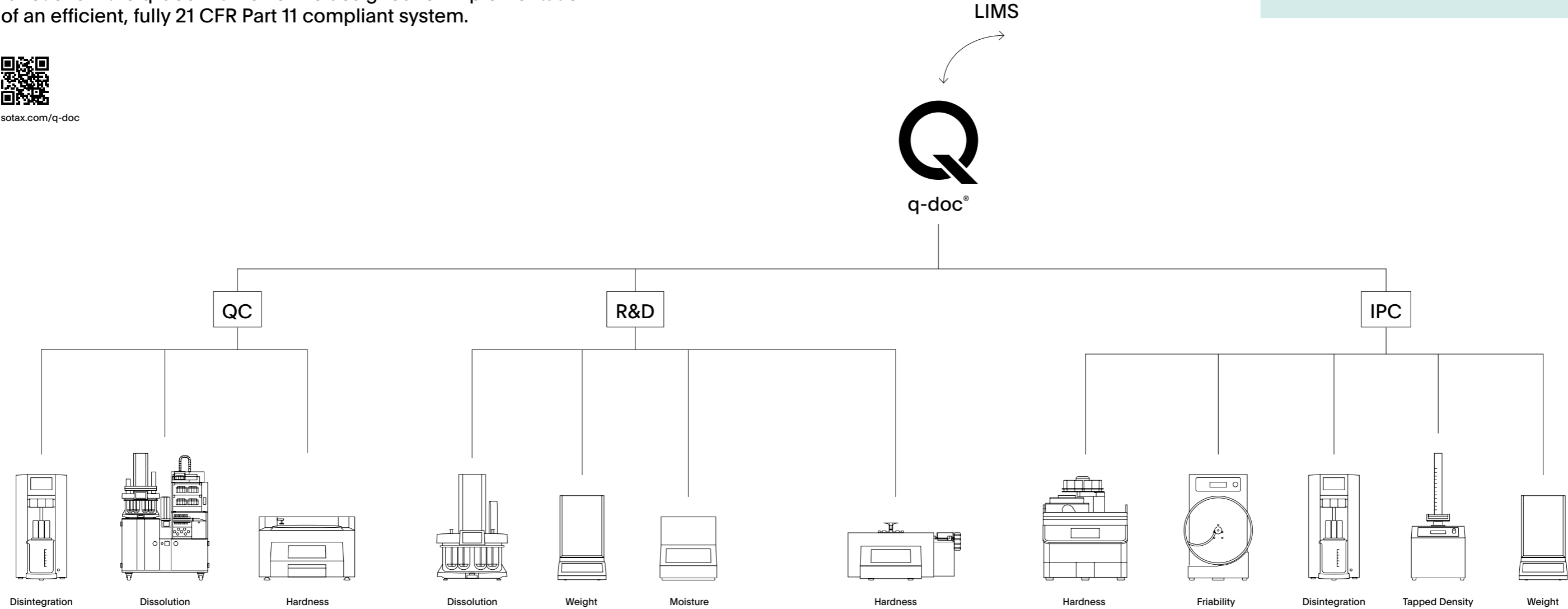
One solution for all instruments

Networking

21 CFR Part 11

Consolidated batch reporting

Data Integrity



# SOTAX Worldwide

## Europe

**Switzerland (HQ Europe)**  
Aesch / Basel  
P Tech Support +41 61 487 5460  
P Office +41 61 487 5454  
info@sotax.com

**Czech Republic**  
Prague  
P Tech Support +41 61 487 5460  
P Office +420 246 039 260  
sotaxcz@sotax.com

**France**  
Saint-Louis  
P Tech Support +41 61 487 5460  
P Office +33 3 8970 0846  
info@sotax.com

**Germany**  
Lörrach  
P Tech Support +41 61 487 5460  
P Office +49 7621 16 5635  
info@sotax.com

**Great Britain**  
Foston / Derbyshire  
P Tech Support +41 61 487 5460  
P Office +44 20 8349 6947  
sotaxgb@sotax.com

**Italy**  
Milan  
P Tech Support +41 61 487 5460  
P Office +39 02 8363 2641  
sotaxitalia@sotax.com

## Americas

**USA (HQ Americas)**  
Westborough, MA  
P Tech Support +1 508 544 4040  
P Office +1 508 417 1112  
sotaxusa@sotax.com

**Canada**  
Westborough, MA  
P Tech Support +1 508 544 4040  
P Office +1 508 417 1112  
sotaxcanada@sotax.com

## Asia-Pacific

**Thailand (HQ Asia-Pacific)**  
Bangkok  
P Tech Support +91 99 202 11 211  
P Office +66 26 42 68 62  
sotaxasia@sotax.com

**China**  
Shanghai  
P Tech Support +41 61 487 5460  
P Office +8621-6135 6268, ext. 205  
sotaxchina@sotax.com

**India**  
Mumbai  
P Tech Support +91 99 202 11 211  
P Office +91 22 4295 0191  
sotaxindia@sotax.com

sotax.com

