

Hardness
Automatic

AT 50

The AT50 sets new standards for highly efficient testing of multiple batches in the lab – or fully integrated online testing with your tablet press. Robust and fast with reliable precision.

SOTAX



Automatic Tablet Testing System

AT50 — One for All.

Hardness
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For all your tablets

Fast testing of
5 parameters

Small footprint

Online with your
tablet press

Benchtop in R&D, QC,
and IPC labs

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



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



sotax.com/AT50

For all your products.



Convex



Oblong



Oval



Almond



Hexagon

All tablets. All environments.

Reliable positioning of samples for repeatable results is at the very heart of the AT50. Knowing that some tablet shapes pose different automation challenges for separation, transport, and correct alignment, our engineers combined proven features with new innovations. The result is an extremely flexible, robust, and fast automatic testing system. The AT50 simply handles all your tablets – including difficult-to-orient oblongs, oval tablets, and even unconventional convex or flat shapes.

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Make testing continuous.

Up to 10 different products can be loaded concurrently using an integrated magazine feeder. Once started, the AT50 executes complete sequences of test runs without requiring any change-over. You can even make your testing continuous by adding new sample sets to empty magazines anytime.



Round



Triangle



Five Parameters. Three Stations. One Tester.



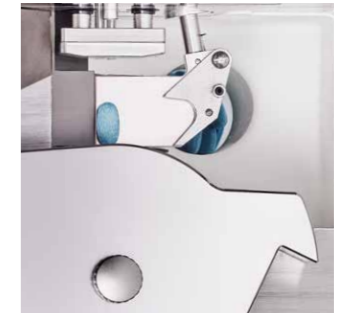
Universal separator.

The self-adjusting high-speed feeder reliably separates all sizes and shapes – from very small samples to large effervescent tablets.



SmartAlign™

A flap with tilting mechanism reliably positions all standard shapes and unconventional dosage forms such as hexagonal tablets.



AutoAlign™

Two counter-rotating rollers accurately align even the most convex shapes for width/length (diameter)/hardness measuring.



Trouble-free weighing.

Tablets are automatically centered on the vibration-resistant weighing platform. Fragments or double tablets are immediately discharged.



Highly accurate thickness.

A linear feed track ensures that tablets always arrive on their convex side for correct thickness measuring. An integrated TouchControl™ sensor prevents compression during measuring.

For the lab.



SmartAdd™ — Keep on running.

Short cycle times and multi-batch handling make the AT50 a true workhorse for your laboratory. Receive a new lot from production for urgent testing or a new stability timepoint comes into the lab? No problem, the SmartAdd™ magazine feeder allows flexible interaction and avoids downtime.

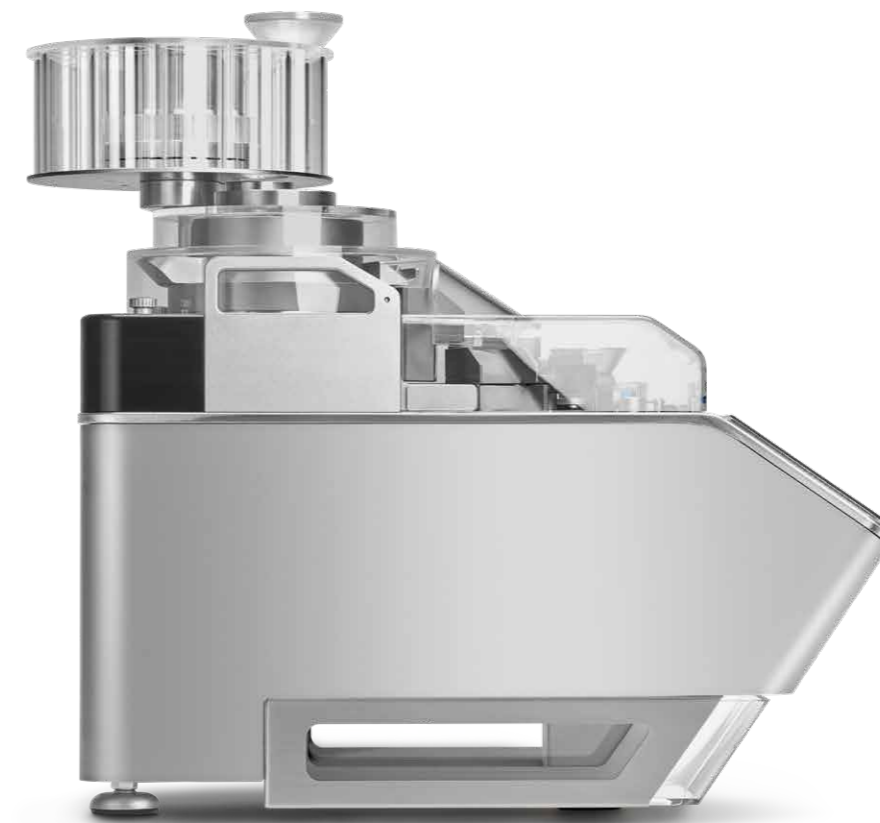


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Minimum bench space.

Compact and robust, the AT50 has a small footprint and fits on a standard laboratory bench. The open test area ensures that measuring processes remain fully visible at all times and that operators can easily perform routine cleaning of the stations.



Load up to 10 different products

Continuous testing

Add new sample sets anytime

No change-over

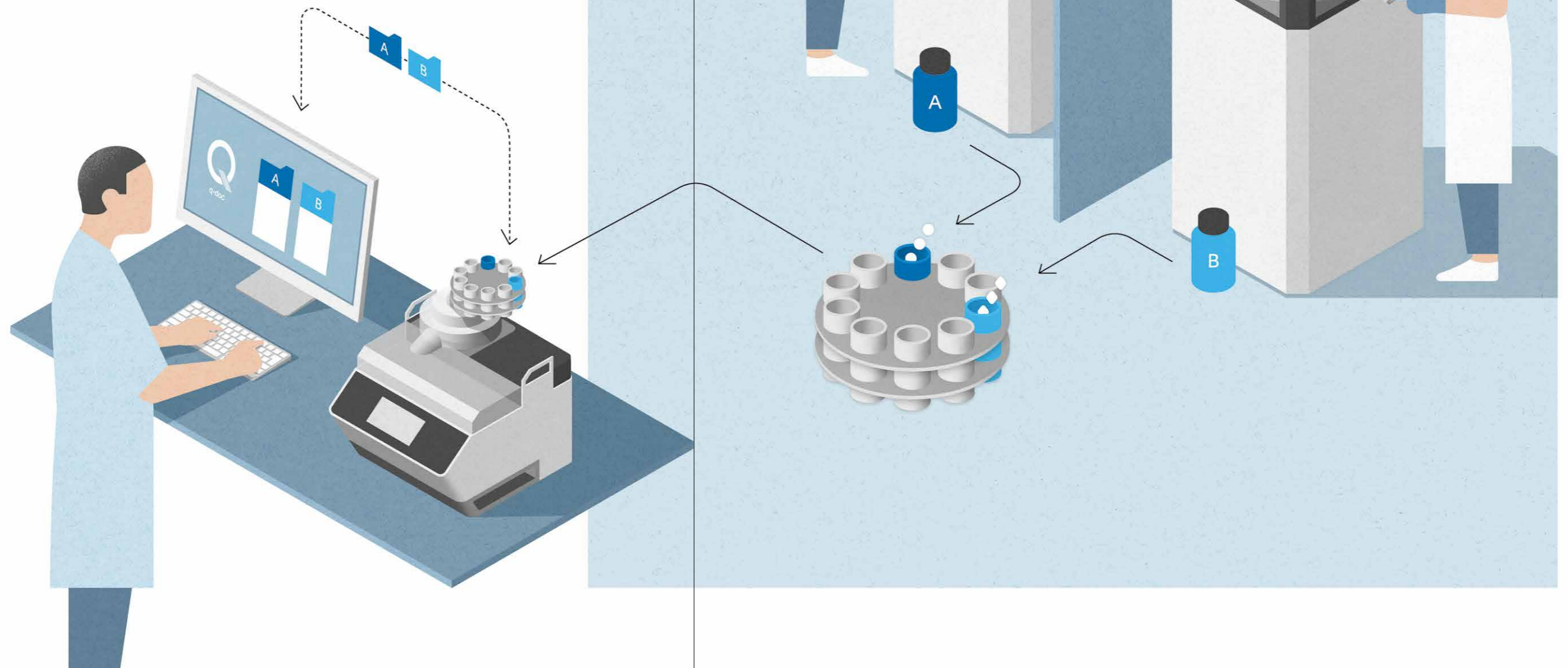
Excellent visibility of all processes

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Continuous Testing.

Automatically execute multiple test runs for different products and batches. Simplify DOE studies in R&D and maximize testing efficiency in QC and IPC laboratories. Benefit from built-in data integrity and network your AT50 with powerful q-doc® data management software to automatically protocol all results in full compliance with 21 CFR part 11 requirements.

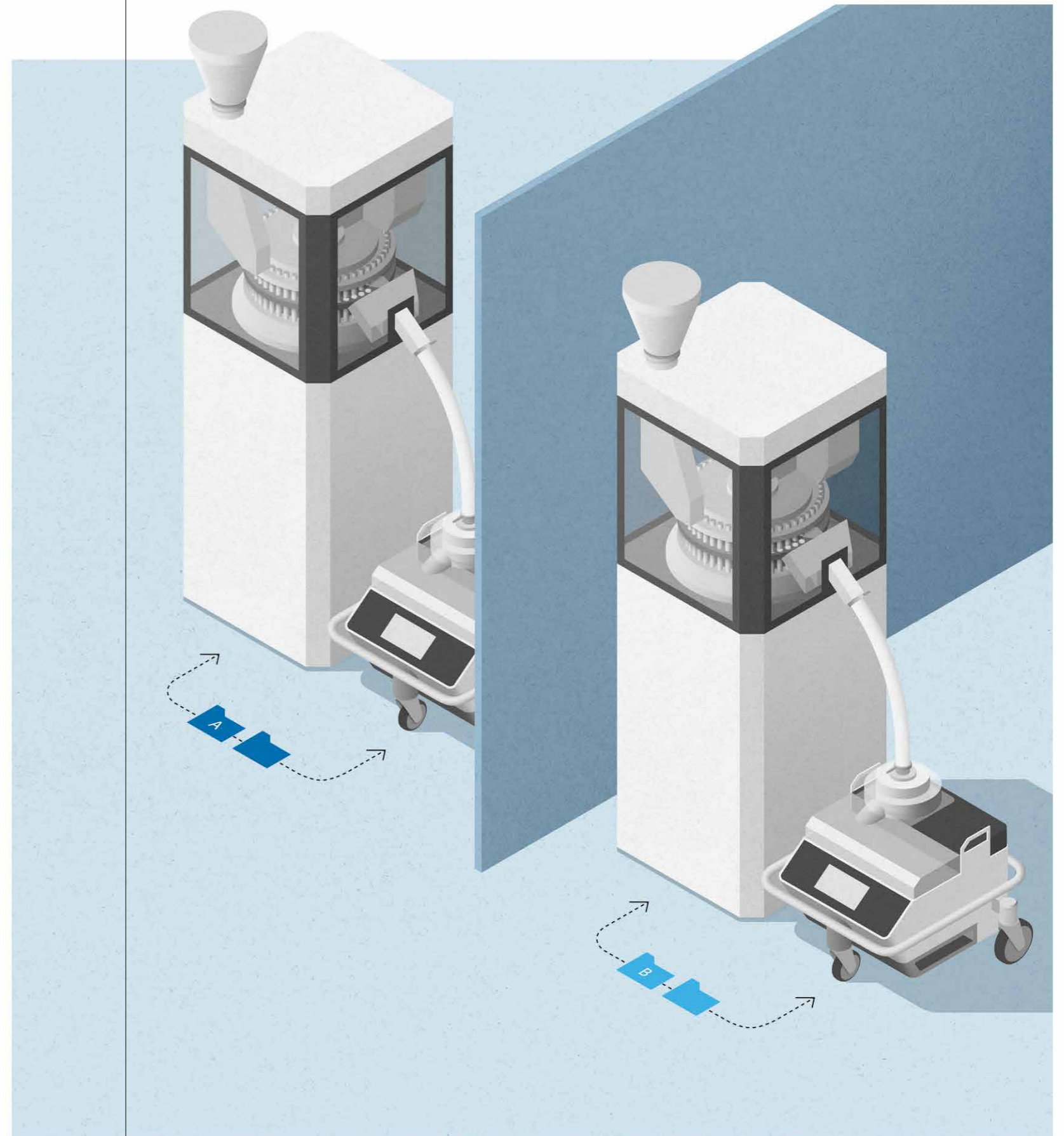


For your tablet press.

Designed for demanding environments such as compression rooms, the AT50 can be connected online with your tablet press for 100% unattended in-process control (IPC). Tablet samples are automatically diverted and tested in regular time intervals – without any operator required. Based on measured results, the tablet press self-adjusts compression parameters if needed.



Hardness
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Automated sample collection.

Collect samples at regular time intervals for future reference or for further testing in the lab. Tested, non-broken tablets are automatically diverted into individual bins. Different collection modes for double-sided presses and bulk collection are readily available.

No dust inside the tester.

Prevent dust from entering the AT50 using our unique DustX™ brake cyclone. Diverted samples are gently decelerated as they arrive at the tester and dust is completely removed. Ideal for both single and double-sided tablet presses with venturi system.

AT50 Technical Specifications

| | | |
|----------------------------------|--|---|
| Weight (Mass) | Integrated weighing module | Mettler Toledo® |
| | Units of measure | mg / g |
| | Resolution | 0.1 mg |
| | Measuring range | up to 60 g |
| | Repeatability (typically) | 0.15 mg |
| | Linearity deviation (typically) | 0.3 mg |
| Thickness | Units of measure | mm / inch |
| | Resolution | 0.01 mm |
| | Measuring range | 2 – 20 mm |
| | Repeatability | ± 0.03 mm |
| Width / Length (Diameter) | Units of measure | mm / inch |
| | Resolution | 0.01 mm |
| | Measuring range | 2 – 25 mm |
| | Repeatability | ± 0.03 mm |
| Hardness | Units of measure | N / Kp / Sc |
| | Measuring range | 2 – 800 N |
| | Repeatability | ± 1 N |
| | Dr. Schleuniger® S-beam load cell | 99.98% linearity, over entire measuring range |
| | Calibration (Adjustment / Verification) | Static with reference weights / Dynamic with DQD™ |
| Measuring Principle | Constant speed | 0.01 – 5 mm/s, programmable |
| | Linear force increase | 10 – 200 N/s, programmable |
| Power Supply | 115 – 230 V / 50 – 60 Hz | |
| CE Conformity | The AT50 fully complies with all CE and EMC equipment guidelines relative to mechanical and electrical safety and electromagnetic compatibility. | |

| | | Stand-alone | Online |
|---------------------------|---|--------------------|--------------------|
| Configuration | 10-magazine feeder, with SmartAdd™ | ○ | – |
| | DustX™ brake cyclone | – | ○ |
| | Sample collector, with 10 collection bins | – | ○ |
| | Integrated wheels | – | ● |
| | Integrated feet | ● | – |
| Tablet Alignment | SmartAlign™ with flap | ● | ● |
| | AutoAlign™ with rollers | ○ | ○ |
| Controller | q-doc® data management software | ● | ○ |
| | Tablet press ¹⁾ | – | ● |
| Ingress Protection | (against dust and water) | IP52 | IP52 |
| Weight | (without packaging) | 70.5 kg (156 lbs) | 76 kg (168 lbs) |
| Dimensions | Width | 450 mm (17.8 inch) | 580 mm (22.8 inch) |
| | Depth | 600 mm (23.7 inch) | 730 mm (28.7 inch) |
| | Height | 475 mm (18.7 inch) | 527 mm (20.8 inch) |

¹⁾ Different communication protocols available for various tablet press models

● included / required
○ optional

Technical specifications are subject to change without prior notice. Products illustrated in this brochure may include options or modifications not fitted as standard. No liability for errors and omissions.



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