

Hardness
Automatic

AT 50

The AT50 sets new standards for highly efficient online testing with your tablet press – allowing for unattended operation with self-adjustment of compression parameters in real-time.

SOTAX



Automatic Online Hardness Tester



AT50 — One for All.



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



Bi-directional press communication

Robust & compact IP52 standard

Low inlet height for gravity feeding

Can be easily moved on production floor

Integrated sample collector

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 management or online integration with your tablet press



For all your products.

Up to 5 parameters.

Depending on your tablet press model, the AT50 can measure up to 5 parameters (including width). Once started, a continuous series of tests is automatically executed at regular time intervals without requiring any change-over or operator attendance.



Convex



Oblong



Oval



Almond



Hexagon



Round



Triangle

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.





Short cycle times.



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.

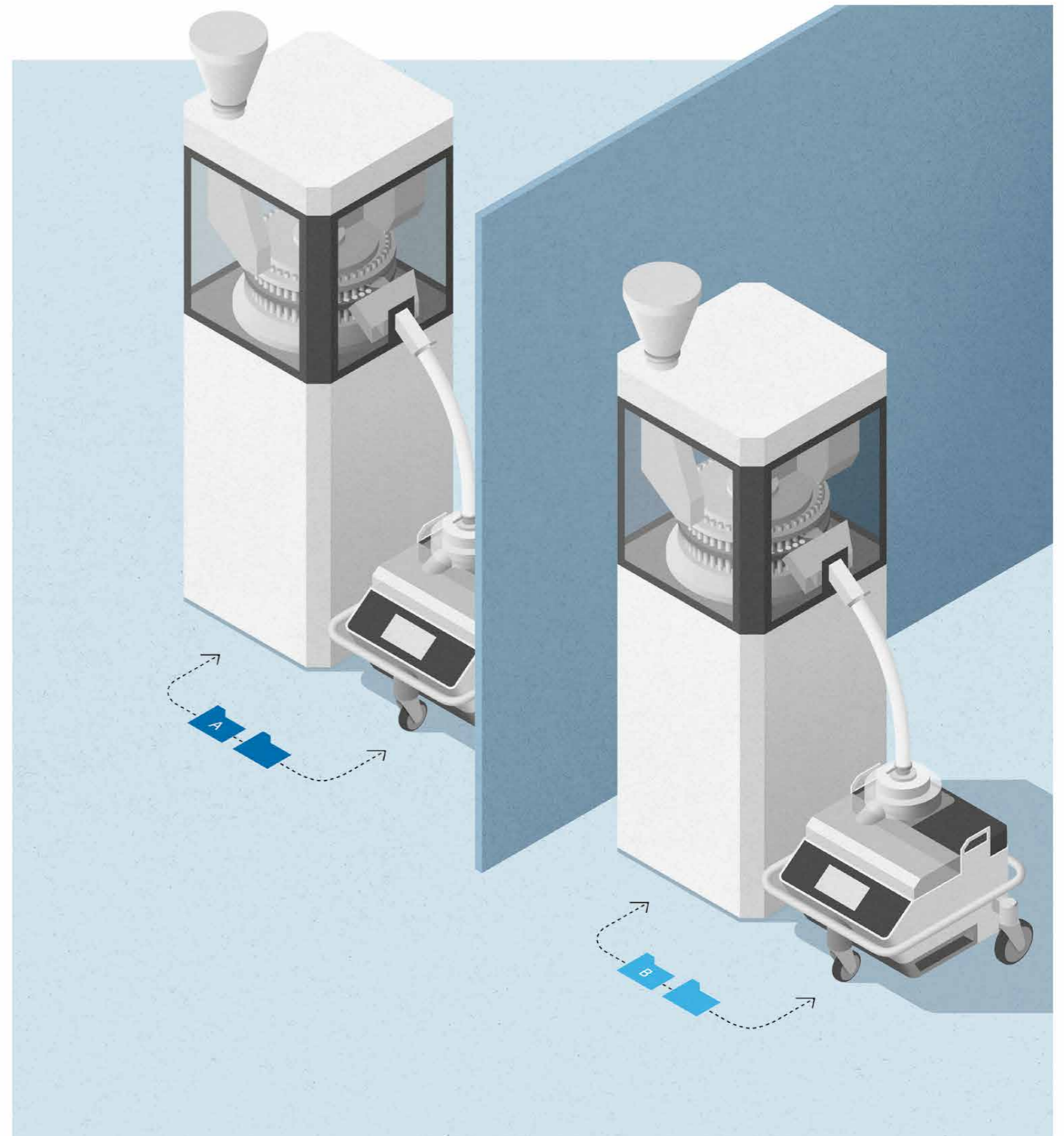
A linear feed track ensures that tablets always arrive on their convex side for correct thickness measuring. An integrated TouchControl™ sensor prevents compression during measuring.

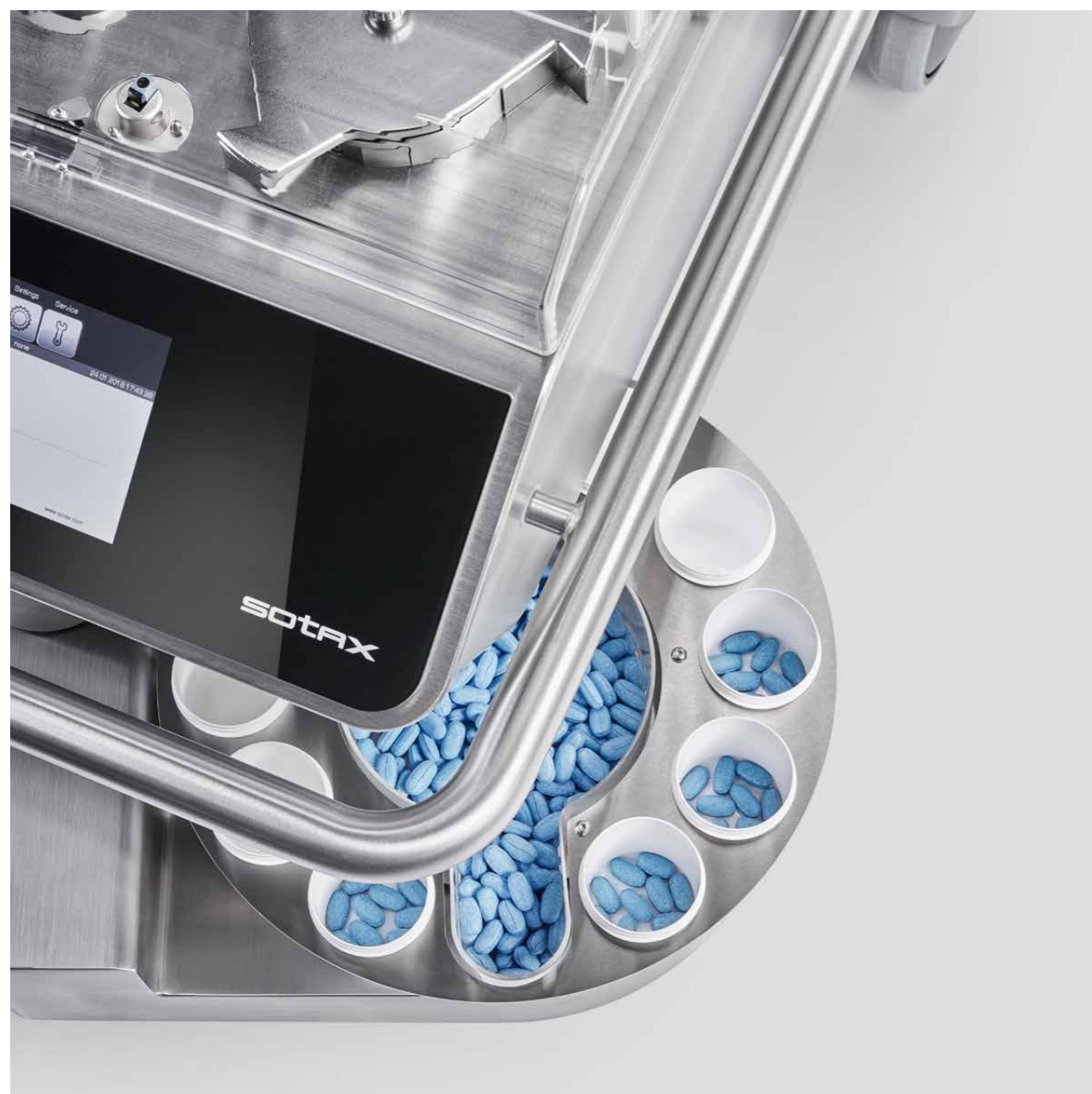
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For your tablet press.

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.





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	0.05 – 5 mm/s, programmable
	Linear force increase	10 – 200 N/s, programmable
Power supply	100 – 240 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.	

		Online
Configuration	DustX™ brake cyclone	<input type="radio"/>
	Sample collector, with 10 collection bins	<input type="radio"/>
	Integrated wheels	<input checked="" type="radio"/>
Tablet alignment	SmartAlign™ with flap	<input checked="" type="radio"/>
	AutoAlign™ with rollers	<input type="radio"/>
Controller	q-doc® data management software	<input type="radio"/>
	Tablet press*	<input checked="" type="radio"/>
Ingress protection	(against dust and water)	IP52
Weight	(without packaging)	76 kg (168 lbs)
Dimensions	Width	580 mm (22.8 inch)
	Depth	730 mm (28.7 inch)
	Height	527 mm (20.8 inch)

* 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.

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.

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