DT 50

The bathless DT50 revolutionizes disintegration testing. Easy to operate with automatic test start, induction heating system, and 100 % unattended end-point detection.

Automatic Disintegration Tester

DT50 —
Bathless. Better.
Beautiful.

sotax.com/DT50

100 % unattended
end-point detection

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Bathless

———

Automatic test start

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Permanent medium
temperature monitoring

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Electronic data
management

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

Modular additional stations

Preheating of media for
seamless pH-changes

Master Station

Client Station
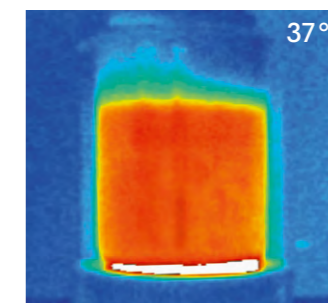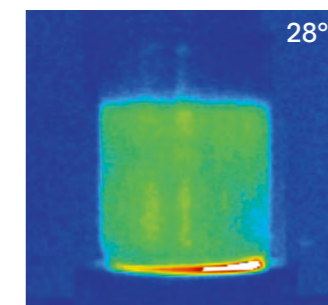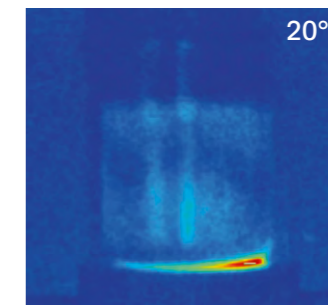
Media Preparation Station

Innovative design.

Temperature under control.

Fast bathless induction heating reduces unproductive waiting times to an absolute minimum and ensures very homogeneous temperature distribution inside the beaker. Medium temperature is permanently monitored. Once the target temperature has been reached, the test starts automatically – and continuous temperature readings are taken for reporting purposes.
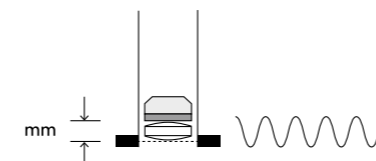

20°

28°
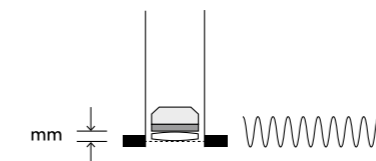

37°

End-point detection.
Programmable.

How does it work?

The remaining tablet height is automatically determined at each upward stroke of the basket. An electromagnetic frequency shift caused by the disc at different distances from the bottom of the basket allows to determine whether a sample has disintegrated. For products that do not disintegrate completely (e.g. capsule shells), the acceptable remaining residual height can be programmed.
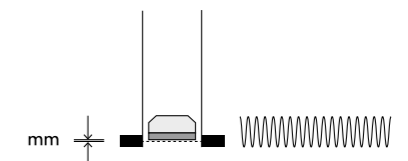
Tablet intact	Disintegration in progress	Tablet disintegrated

Flexible configurations.

Extend your DT50 to a disintegration system with up to two independent testing stations – plus one Media Preparation Station. Retrofit is simple with a standard Ethernet connection. The modular design ensures that the system layout remains flexible and can be changed anytime if needed.

Easy handling.

From test setup to cleaning – the DT50 has been optimized for fast and ergonomic handling. The wireless baskets with self-centering magnetic coupling can be exchanged within seconds. Upon completion of each test, a report with recorded disintegration times per tablet, statistics, and temperature protocol is automatically printed.
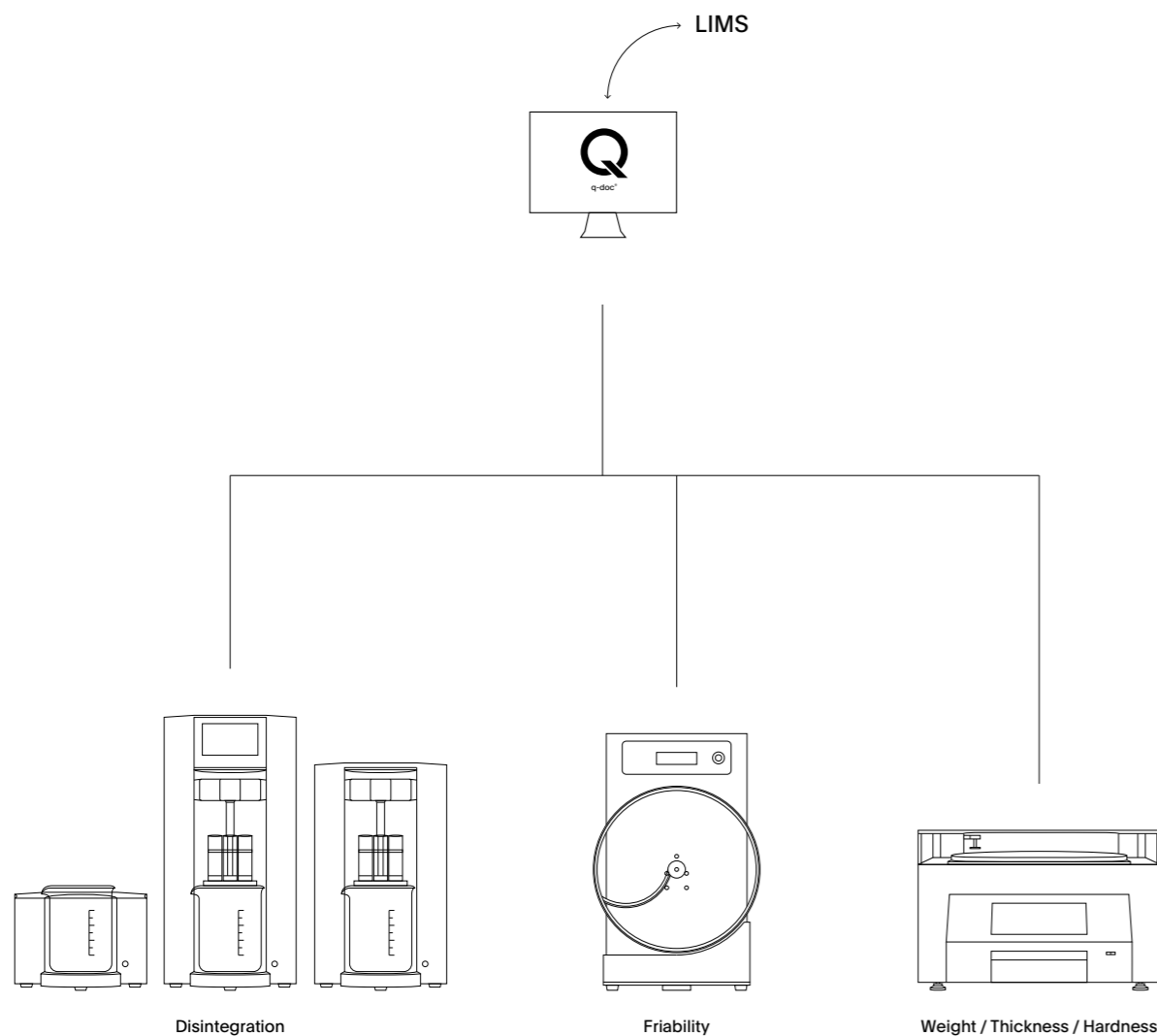

Maximum Configuration with 1× Master Station, 1× Client Station and 1× Media Preparation Station

Manage your data.

The DT50 integrates seamlessly with q-doc® data management software. Each station is controlled individually. To make testing of large tablets and re-tests according to USP <701> as easy as possible, results from multiple stations can be combined into a single test protocol. For efficient batch analysis, q-doc® automatically consolidates all testing data into one clearly structured batch report.

Example:
q-doc® network with DT50

LIMS

Q
q-doc®

Disintegration Friability Weight / Thickness / Hardness

DT50 Technical Specifications

Stations		1 – 2 independent test stations
End-point detection	Technology	Programmable residue height, electromagnetic frequency shift detection
	Automatic detection mode, per sample	●
	Manual detection mode, per sample	●
	Manual detection mode, all samples	●
Basket types (Apparatus A)	6-tube basket, 10 mesh, automatic	○
	6-tube basket, 10 mesh, manual	○
Basket types (Apparatus B)	3-tube basket, 10 mesh, automatic	○
	3-tube basket, 10 mesh, manual	○
Other basket types	6-tube basket, 18 mesh, automatic	○
	6-tube basket, 31 mesh, automatic	○
	Single tube basket, 10 mesh, manual	○
Accessories	Capsules support, for 6-tube basket	○
	Disc remover tool	○
Strokes per minute	Frequency (setting according to USP / Ph. Eur.)	30
	Frequency (setting according to JP)	31
	Accuracy	±1
Stroke height	Height	55 mm
	Accuracy	±2 mm
Temperature	Range	10 – 50 °C, programmable [1]
	Temperature control	IR sensor, per station
	Measuring accuracy	±0.2 °C
User interface [2]	Program capacity	100 products / methods
	User access restriction	●
Printer [2]	PostScript® 3 (PS3)	Ethernet
	Epson® 40col.	RS-232 serial
Data Management [2]	q-doc® software, with full control of stations	○
CE Conformity	The DT50 fully complies with all CE and EMC equipment guidelines relative to mechanical and electrical safety and electromagnetic compatibility.	

		Master	Client	Media Preparation
Max. # stations	(per system)	1	1	1
Interfaces	Ethernet	●	●	–
	RS-232 serial	●	–	●
Power supply	100 – 240 V / 50 – 60 Hz	●	●	●
Power consumption		50 Watt / 3A	50 Watt / 3A	50 Watt / 3A
Weight	(without packaging)	8 kg (18 lbs)	7 kg (16 lbs)	3 kg (7 lbs)
Dimensions	Width	225 mm (8.9 inch)	225 mm (8.9 inch)	225 mm (8.9 inch)
	Depth	200 mm (7.9 inch)	200 mm (7.9 inch)	200 mm (7.9 inch)
	Height	460 mm (18.1 inch)	380 mm (14.9 inch)	155 mm (6.1 inch)

[1] no cooling possible
[2] applies to DT50 system (Client station control via Master station)

● 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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