



# DISI Automatic Disintegration Tester

Automatic recording of tablet disintegration time  
Display of disintegration curve per tablet  
Up to 4 independent testing stations  
Professional reporting including statistics

# DISI

The DISI automatically detects disintegration time of tablets and capsules in full compliance with current Pharmacopeia regulations. Additionally, the tester records the disintegration characteristics of individual tablets during the entire test – making it possible to address fluctuations and inconsistencies by visualizing the disintegration process. Its solid and virtually maintenance-free design make it an ideal choice for R&D, QC laboratories and production environments.

## Unique detection principle

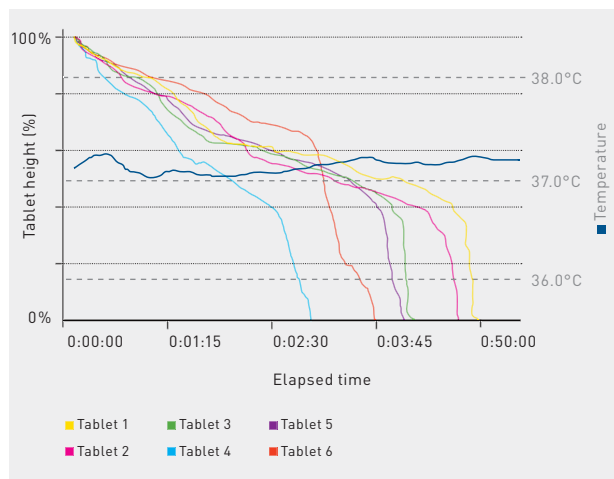
Using patented electromagnetic measuring technology, the remaining tablet height is recorded with each basket upstroke and displayed graphically in real-time on a connected PC. As soon as a tablet has completely disintegrated, the DISI automatically records its individual end time. When testing capsules, the remaining tablet height can be programmed to a defined distance – making the disintegration process highly repeatable.

## Temperature control

In addition to a high-performance heater/circulator with precise temperature control, every basket has its own temperature sensor. Test medium temperature inside the basket is continuously monitored, recorded and graphically displayed together with the disintegration curve.

## Corrosion-free baskets

The DISI and all baskets are completely corrosion-free and very easy to clean. The baskets can be disassembled within seconds for cleaning. All electronics are sealed inside the basket. For fast and easy handling, each basket is equipped with a self-centering magnetic coupling without requiring any cables for data transmission. Standard 6-tube baskets and 3-tube according to USP / EP available.



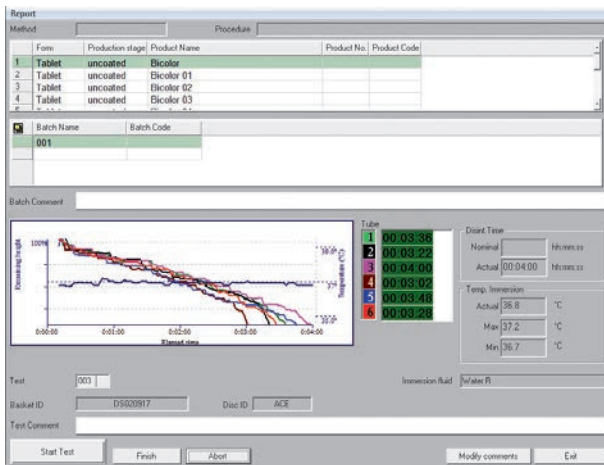
→ Graphical display of disintegration curves and test medium temperature



# Proven Reliability

## Comprehensive test reporting

All measured data is automatically recorded in PH21 PC software – fulfilling all requirements of a 21 CFR, Part 11 compliant system. Every tablet can be traced back via the batch ID number at any time. Statistical reports can be obtained in tabular and/or graphical format. Standard USP and EP methods including re-testing procedures are already pre-programmed in the software.



→ PH21, Data management software

## Solid design

The DISI has a high-end surface finish and solid mechanics. Stepper motors and linear drives guarantee the highest repeatability and linearity. A simple and fully automated electronic calibration routine ensures that all settings are according to Pharmacopeia requirements.



→ Self-centering basket without any cables

# Models

The DISI is available with up to four independent stations. Different models accommodate individual testing requirements.

DISI-1



→ single station

DISI-2



→ 2 independent stations

DISI-3



→ 3 independent stations

DISI-4



→ 4 independent stations

## Technical Specifications

DISI, Disintegration tester		
<b>Stations</b>		1-4 (independent)
<b>Strokes per minute</b>	Frequency	30
	Accuracy	+/- 0.1
<b>Stroke height</b>	Height	55 mm (2.17 inch)
	Accuracy	+/- 0.5 mm (0.02 inch)
<b>Temperature</b>	Acquisition range	35-39°C, 0.1°C resolution
	Accuracy	+/- 0.2°C (within acquisition range)
<b>End-time detection</b>	Detection principle	electro-magnetic
	Data acquisition	with each basket stroke (every 2 s)
	Min. threshold	0.2 mm (0.0079 inch)
	Min. test duration	Standard: → 10s recommended Optional: → 2s (precision-calibrated basket required)
<b>Interfaces</b>		RS 232
<b>Power supply (Heater / circulator)</b>	EU-Standard	230 V/50-60 Hz, 2.1KW
	US-Standard	110 V/50-60 Hz, 1.0KW
<b>CE Conformity</b>	All DISI models fully comply with all CE and EMC equipment guidelines relative to mechanical and electrical safety and electromagnetic compatibility.	

		DISI-1	DISI-2	DISI-3	DISI-4
<b>Power supply</b>	(Drive unit)	100-240 V/ 47-63 Hz, 50W	100-240 V/ 47-63 Hz, 75W	100-240 V/ 47-63 Hz, 100W	100-240 V/ 47-63 Hz, 125W
<b>Volume water bath</b>		5.5 l	7 l	8.5 l	10 l
<b>Weight</b>	(without packaging) / (with packaging)	approx. 28 kg (61.7 lbs)	approx. 39 kg (86 lbs)	approx. 50 kg (110.3 lbs)	approx. 61 kg (134.5 lbs)
<b>Dimensions</b>	Width	335 mm (13.2 inch)	470 mm (18.5 inch)	605 mm (23.8 inch)	740 mm (29.1 inch)
	Height	705 mm (27.8 inch)	705 mm (27.8 inch)	705 mm (27.8 inch)	705 mm (27.8 inch)
	Depth	250 mm (9.9 inch)	250 mm (9.9 inch)	250 mm (9.9 inch)	250 mm (9.9 inch)

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.

Your local sales & service partner



Pharmatron AG | Uttigenstrasse 28 | CH-3600 Thun | Switzerland  
P +41 (0)33 227 50 00 | F +41 (0)33 227 50 01 | info@pharmatron.ch  
www.pharmatron.com