



MultiTest 50

Tablet Hardness Tester

Precisely measure up to 5 parameters
Simple EasyTouch™ operation
Fast multi-parameter measurement
Robust design with minimal footprint
Proven Dr. Schleuniger® hardness measuring technology



Swiss Quality

High quality components paired with Swiss precision engineering provide for long product life and minimize costly downtime. In order to ensure maximum reliability of your MultiTest 50, all instruments are tested according to strict internal quality standards before they leave the factory.

Hardness Testing

With more than 40 years of experience and more than 20'000 testers in the market, Dr. Schleuniger® Pharmatron hardness measuring technology is a safe investment. Like all our hardness testers, the MultiTest 50 offers consistently accurate test results and fully complies with current USP (chapter 1217, tablet breaking force) and EP (2.9.8, resistance to crushing of tablets) requirements.

Quality matters.

MultiTest 50

The MultiTest 50 is a manual tablet testing system that offers the highest precision, robustness, and exceptional user-friendliness. From a basic hardness test to complete measuring of up to five physical parameters (weight, thickness, width, diameter/length, hardness) – the MultiTest 50 has been designed for efficient operation. Advanced electronics and robust mechanics provide for highly reliable test data that can be automatically evaluated for ease of regulatory compliance. Its outstanding quality with proven Dr. Schleuniger® Pharmatron hardness measuring technology makes the MultiTest 50 the ideal choice for all kinds of environments – from directly inside the compression room (IPC) to R&D and Quality Control laboratories.



→ MultiTest 50
Tablet hardness tester

100 % Precision

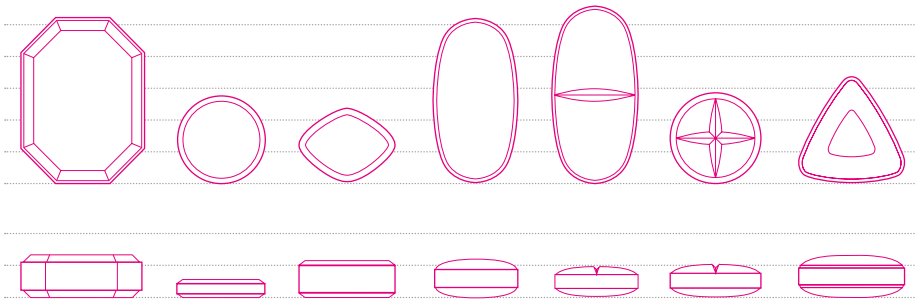
The MultiTest 50 sets new standards in precision and repeatability. Powerful state-of-the-art electronics, a precision S-beam load cell, and solid mechanical components provide for extremely accurate results. Samples are individually placed into the MultiTest 50 testing area. Practically any imaginable design, including oblong, diamond, hexagon, and other special shapes, can be reliably positioned and measured.

Simple tablet handling

The open and accessible test area allows for simple tablet orientation by the operator. To assist with the alignment of very convex shapes, the MultiTest 50 features grooved quick-change tongues that can be exchanged in a matter of seconds. No tools are required for such a change-over and the flexibility of the instrument to handle small tablets or special shapes is not limited in any way. In addition, clip-on jaws for 3-point bending strength tests along with other special applications are readily available to further extend the unit's testing capabilities.

Fast and reliable

The entire hardness measuring process has been optimized for efficient operation – allowing operators to quickly perform a series of tests without unproductive waiting times due to jaw homing procedures commonly seen with other hardness testers. Even in demanding environments, the robust construction guarantees highly accurate and reliable measurements. The MultiTest 50 also incorporates innovative linear measuring technology for exceptionally precise thickness, width, and diameter/length measurements.



→ Testing of virtually all tablet shapes and sizes with the MultiTest 50



→ Quick-change tongue, flat



→ Quick-change tongue, with groove



→ Easily exchange tongues without tools



Fast, Faster, FastTest™

In “FastTest™” configuration, the MultiTest 50 is a multi-purpose instrument that accumulates measurements from an integrated thickness gauge and from an external analytical balance in a single test report. Instead of collecting data individually and having to deal with various reports, all results are automatically evaluated and documented.

Simply the fastest way to perform tests. The operator transfers tablets after weighing to a carousel mounted on top of the MultiTest 50. Once weight measurements have been acquired for a series of tablets, thickness is measured using the integrated precision gauge. With one hand turning the carousel and the other controlling the thickness gauge, accurate measurements for the entire series are taken in a very short time without compromising the order of test samples.

Width, diameter/length and hardness tests are executed afterwards by placing single tablets in the test area. To save time, operators can still take additional weight and thickness measurements while a hardness test is running. In automatic mode, individual measurements are started at programmable intervals. With a little practice, operators are able to perform tests with the MultiTest 50 FastTest™ as quickly as most automatic systems on the market.



→ FastTest™: Integrated thickness gauge and tablet carousel

EasyTouch™

User-friendliness redefined

Operating a manual tablet tester has never been easier. The intuitive icon-based EasyTouch™ user interface sets new standards for fast and user-friendly control. Three different test modes allow using the MultiTest 50 according to individual requirements.

FullTest™

Automatically evaluate test results

To start a test, the operator only needs to select a product name and push start. All measurements taken are then immediately evaluated using programmed product specifications. Printed test reports can be configured to automatically include all specifications.

The MultiTest 50 allows programming of up to 100 products including nominal values and T1/T2/PL limits for all parameters. Additionally, test conditions such as the measuring principle used or the units in which results must be reported can be set individually for each product as required. Integrated 3-level user administration ensures that only authorized personnel can create or modify data. To prevent data loss under any circumstances, a backup of all products can be easily saved to a USB flash drive – or even shared amongst several MultiTest 50 testers.

EasyTest™

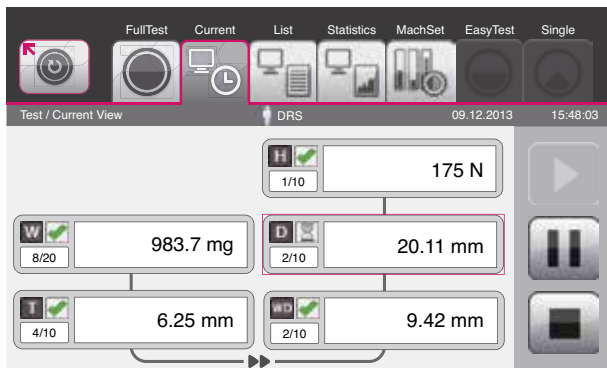
Simply enter sample size

Starting a test doesn't get any easier: enter the number of samples to be tested and push start. Parameters which are not needed are simply deactivated at the click of a button – and in case of unequal sample sizes the respective number can be changed per parameter.

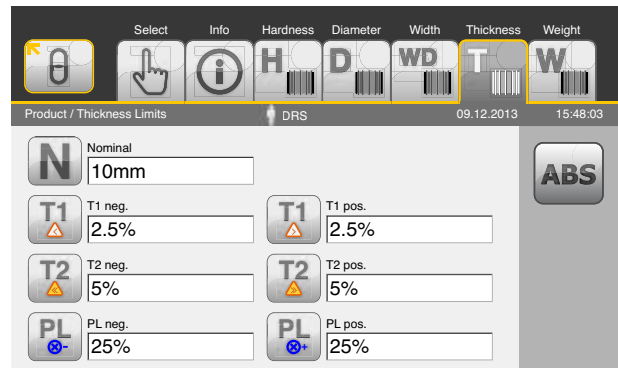
SingleTest™

Quickly test a single tablet

Particularly useful during the setup of a tablet press or in R&D. Tests for a single tablet can be started without the need of programming.



→ View results of all measured parameters



→ Easy programming of product specifications for automatic evaluation of test results



EasyTouch™ Highlights

- 3 different test modes
- View test results as needed: current measurements or list view
- Statistics view at end of test
- User interface in local language
- 2 configurable print templates
- Automatic printing at end of test
- USB, Ethernet LAN and serial printer interfaces
- Save test results on USB flash drive if needed
- Programming of up to 100 products, incl. T1/T2/PL limits
- Product-specific setting of measuring principle
- Full backup functionality
- 3-level user administration
- Screenshot function to easily create own SOPs

PC Software

The MultiTest 50 can be connected to PC software for 21 CFR, Part 11 compliant electronic data management. Measured results and test reports are collected in a database and can be exported either as PDF or in Microsoft Excel® compatible format.

Technical Specifications

MultiTest 50, Tablet hardness tester		
Weight	Measuring range	Up to 100g*
	Resolution	0.1 mg*
	Units of measure	mg / g
	Type of external balance	Mettler Toledo®, Sartorius®
Thickness	Measuring range (integrated thickness gauge)	Up to 20mm (0.79 inch)
	Measuring range (internal)	Up to 35mm (1.37 inch); optional 65mm (2.55 inch)
	Resolution	0.01mm (0.00039 inch)
	Units of measure	mm / inch
Diameter / Length / Width	Measuring range (internal)	Up to 35mm (1.37 inch); optional 65mm (2.55 inch)
	Resolution	0.01mm (0.00039 inch)
	Units of measure	mm / inch
Hardness	Measuring range	Up to 800N
	Accuracy	Better than +/- 1 N
	Units of measure	N, Sc, Kp, programmable user-defined factor (based on N)
Hardness measuring principle	Constant speed	Up to 5 mm/sec, programmable
	Linear force increase	Up to 200 N/sec, programmable
Printer interface	Ethernet, USB, RS232	
Printer type	PostScript® network printer (LAN), USB PostScript® printer, serial printer	
Power supply	110-230 V / 50-60 Hz	
CE Conformity	All MultiTest 50 versions fully comply with all CE and EMC equipment guidelines relative to mechanical and electrical safety and electromagnetic compatibility.	

*depending on model of external balance

		Standard	Standard FT
Configuration	Hardness	●	●
	Diameter / Length	○	●
	Width	○	●
	Thickness (internal)	○	●
	Thickness (FastTest™)	—	●
	Weight (external)	○	○
Test modes	FullTest™	●	●
	EasyTest™	●	●
	SingleTest™	●	●
Product programming		●	●
Options	Debris collection bin	○	○
	SmartProtect™	○	○
	Grooved tongue	○	○
	65mm option	○	○
Weight	(without packaging)	9.5 kg (21 lbs)	10 kg (23 lbs)
Dimensions	Width	404 mm (15.9 inch)	404 mm (15.9 inch)
	Height	177 mm (7 inch)	207 mm (8.2 inch)
	Depth	288 mm (11.4 inch)	288 mm (11.4 inch)
Software	q-doc Prolab®	○	○

● included ○ optional — not available

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.



Dr. Schleuniger® Pharmatron is a brand of the SOTAX Group

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