MultiTest 50
Tablet Hardness Tester

Precise measuring of up to 5 parameters
Fast and intuitive touch screen operation
Proven Dr. Schleuniger® hardness measuring
Professional reporting including statistics

pharmatron
Dr. Schleuniger®

MultiTest 50

The MultiTest 50 is a manual tablet testing system that offers highest precision, flexibility and exceptional user-friendliness. From basic hardness tests to complete measuring of up to five parameters, including professional reporting, physical testing has never been easier. Besides fast and efficient operation, the MultiTest 50 provides accurate and highly reliable test data, resulting in increased productivity, efficiency and ease of regulatory compliance.
Its outstanding quality with proven Dr. Schleuniger® hardness measuring technology makes the MultiTest 50 the ideal choice for research laboratories, quality control departments and production facilities of pharmaceutical and nutraceutical companies.

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

Hardness Testing
With more than 35 years of experience and more than 15'000 testers in the market, Dr. Schleuniger® 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.
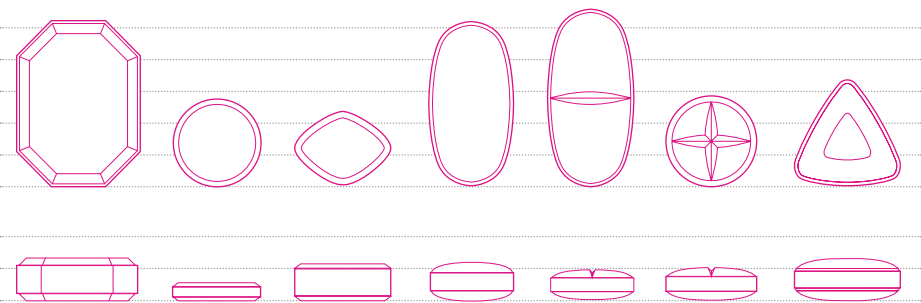
Quality matters.
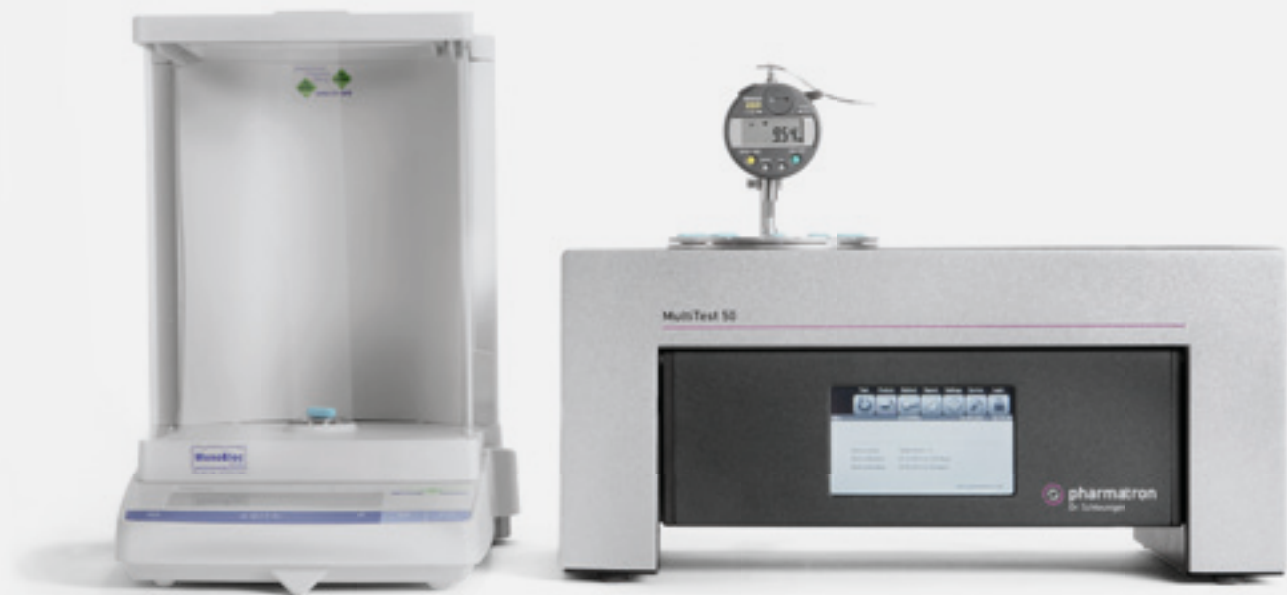
Flexibility and Precision

Samples are placed inside the MultiTest 50 test area individually and by hand. Practically any imaginable design, including oblong, diamond, hexagon and other special shapes can be reliably positioned to measure hardness, diameter / length, width, thickness and weight. Special jaws and quick-change tongues allow testing of even the most unconventional tablet shapes.

The open and easily accessible test area allows for fast and reliable tablet orientation by the operator. To ensure correct alignment of special shapes without limiting the flexibility of the tester, the MultiTest 50 features quick-change tongues with or without groove that can be easily exchanged in a matter of seconds. Even non-symmetrical shapes can be tested using a custom tongue.

The solid construction of the MultiTest 50 guarantees reliable test results at all times. Dr. Schleuniger® hardness measuring technology complies with all current USP and EP requirements and offers consistently accurate results. Tablet hardness is measured using a precision S-beam load cell with a linearity of 99.95 % over the entire measuring range.

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

Fast, Faster, FastTest™

The MultiTest 50 is a manual multi-purpose instrument that optionally accumulates measurements from an external balance and thickness gauge in a single report. In FastTest™ configuration, operators can test tablets as quickly as with any automatic instrument.

Testing larger sample sizes manually can be time-consuming and requires strict sequential testing by the user to assure that all 5 measurements are correctly assigned to individual tablets. In FastTest™ configuration, 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 very short time without compromising the order of test samples. Width, diameter/length and hardness testing is executed afterwards by placing single tablets inside the test area. In automatic mode, individual tests are started at programmable intervals without requiring the operator to actuate testing for each tablet.

User-friendliness

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

From executing simple tests to programming products with T1/T2/PL limits and methods – everything is available at the touch of a button. Intuitive icon-based navigation and logical menu structures with intelligent operator assistance provide for fast test setup, short training times and error-free data entries.

Different views that can be selected while test runs are executed allow the operator to display currently measured values, complete series of measurements and even graphical hardness curves. Professional reports are automatically printed at completion of a test run.

For paperless reporting and central data management in full compliance with 21 CFR, Part 11 requirements, the MultiTest 50 can be networked with the TabStat™ DataCenter.

→ Fast and intuitive icon-based touch screen operation

"FullTest" mode
All product and method specifications can be pre-programmed and easily retrieved for fast test setup. Up to 100 products including nominal values and T1/T2/PL limits for all test parameters are conveniently stored directly on the MultiTest 50. On completion of each test run, a comprehensive report is printed automatically. The report shows all product and test parameters, calibration data and individually measured values with a statistical analysis.

"EasyTest" mode
For tests without T1/T2/PL limits, the EasyTest mode allows direct setting of nominal value and sample size for each parameter. No programming of product or method specifications required. All reporting functions known from the "FullTest" mode remain available.
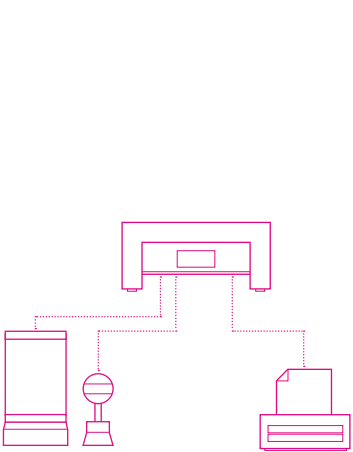
"SingleTest" mode
To quickly measure single tablets without printing a report, simply activate the parameter(s) you would like to test and press start.
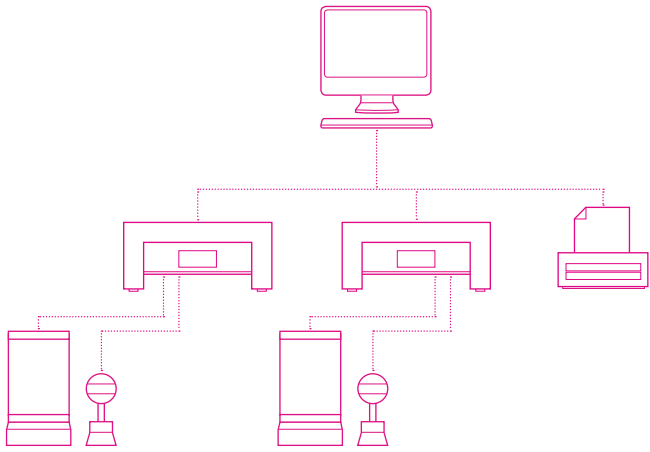
Networking
All MultiTest 50 hardness testers can be networked with TabStat™ DataCenter software for 21 CFR, Part 11 compliant electronic data management. Product and method specifications are administrated centrally and simply loaded to individual testers via network when setting up a new test. Measured results and test reports are automatically stored in a central database. All reports are available anytime for printing and can be exported as PDF or in Microsoft Excel® compatible format.

→ Stand alone operation

→ Professional data management and paperless reporting with TabStat™ DataCenter

Technical Specifications

MultiTest 50, Tablet hardness tester

Weight	Measuring range	0.1 mg – 100 g
	Resolution	0.1 mg
	Units of measure	mg / g
	Type of external balance	Mettler Toledo, Sartorius
Thickness	Measuring range	0 – 13 mm (0 – 0.51 inch)
	Resolution	0.01 mm (0.00039 inch)
	Units of measure	mm / inch
Diameter / Length / Width	Measuring range	0 – 35 mm (0 – 1.37 inch); optional 65 mm (2.55 inch)
	Resolution	0.01 mm (0.00039 inch)
	Units of measure	mm / inch
Hardness	Measuring range	Standard: up to 400 N Optional: 50 N / 500 N / 800 N
	Accuracy	Better than +/- 1 N
	Units of measure	N, Sc, Kp, programmable user-defined factor (based on N)
Hardness measuring principle	Constant speed	0.05 – 5 mm/sec, programmable
	Constant force (load rate)	10 – 200 N/sec, programmable
	Constant power increase	Standard "6D" mode
Interfaces		Ethernet, USB, RS232
Power supply		100 – 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.

		H	DH	TDH	WTDH	FastTest™
Configuration	Hardness	●	●	●	●	●
	Diameter / Length	—	●	●	●	●
	Width	—	●	●	●	●
	Thickness (internal)	—	—	●	●	●
	Thickness (external)	—	—	●	●	●
	Weight (external)	—	—	—	●	●
	FastTest™ configuration	—	—	○	○	●
Weight	(without packaging)	approx. 10 kg (22 lbs)	approx. 10 kg (22 lbs)	approx. 10 kg (22 lbs)	approx. 10 kg (22 lbs)	approx. 11 kg (24 lbs)
Dimensions	Width	420 mm (16.5 inch)	420 mm (16.5 inch)	420 mm (16.5 inch)	420 mm (16.5 inch)	420 mm (16.5 inch)
	Height	185 mm (7.3 inch)	185 mm (7.3 inch)	185 mm (7.3 inch)	185 mm (7.3 inch)	300 mm (11.8 inch)
	Depth	180 mm (7.1 inch)	180 mm (7.1 inch)	180 mm (7.1 inch)	180 mm (7.1 inch)	180 mm (7.1 inch)
Software	TabStat™ DataCenter	○	○	○	○	○
Options	Function checking devices	○	○	○	○	○
	Calibration tools	○	○	○	○	○
	Custom tongues	○	○	○	○	○
	Special jaws	○	○	○	○	○

● 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.

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