SPRINGTEST I **Spring tester**





Manual spring tester small capacity

The Springtest 1 is a very simple and economical system to control compression springs of small capacity. It inludes a very accurate force gauge, a manual test stand, a digital ruler and a special compression plate for springs. The measuring head (force gauge with internal load cell using strain gauges) indicates the force applied, the ruler displays the deflection or the height under load. The

force gauge keeps in memory the peak value.

The bottom self levelling plate guarantees the paralellism of the plates.

System ready to measure. Supplied with a fixed plate diameter 2 in, a self-levelling plate and its certificate of calibration linked to NIST.

System includes:

- Force gauge with internal sensor up to
- Manual test stand BAT750
- Digital ruler length 12 in
- Compression plate diameter 2 in
- Self-Levelling compression plate diameter
- Certificate of Calibration linked to NIST

Optionsal softwares

<u>Caligraph software compatible</u>: software for curve analysis with USB or RS232 results to Microsoft Excel download.

RSIC software compatible: Download your



Models and capacities

SPECIFICATIONS	SPRINGTEST 1-10	SPRINGTEST 1-25	SPRINGTEST 1-50	SPRINGTEST 1-100
Capacity	0 - 2 lb	0 - 5 lb	0 - 10 lb	0 - 20 lb
Accuracy	0.002 lb	0.005 lb	0.01 lb	0.05 lb
Force resolution	0.0002 lb	0.0005 lb	0.001 lb	0.005
Travel	8 in	8 in	8 in	8 in
Travel resolution	0.001 in	0.001 in	0.001 in	0.001 in

Specifications

FEATURES	SPRINGTESTI	FEATURES	SPRINGTEST I
Accuracy	0,1 % FS	Memory	100 result
Resolution	1/10 000 FS	RS232 output	Current value, peak
Data rate	I 000 Hz	Backlight	√
Overload protection	200% FS	Diçgimatic output	
Units	N, Lb, Kg, g, Oz	Analog output	V
Bargraph	$\sqrt{}$	Rechargeable battery	
Peak in traction and compression	$\sqrt{}$	Low battery indicator	$\sqrt{}$
Display peak and current reading in		Certificate of calibration included	V
the same time		Operation without recharging	8 hours
Tare feature	$\sqrt{}$	Use of a pedal	
Adjustable auto-off			
Programmable set points			
Reversible display			

200 %

Load cell protection

SPRINGTEST I Spring tester





The system Springtest I is very easy to use and it is designed to perform your measurements quickly. It can also be used to control incoming goods in quality, production or laboratory. The quality and repeatability of the results are ensured through a specific design made by Com-Ten Industries:

- The manual test stand does not deform when the load increase due to the double steel guide and a drive screw without clearance
- The drive screw allows very precise positioning with a stroke of 0.08in per revolution
- The force gauge features one of the highest accuracy on the market: 0.1% of full scale with a sampling rate of 1,000~Hz
- The displacement transducer with digital display has a resolution of 0.001 in to ensure a repeatable and accurate compression
- The self levelling support ensures the parallelism with the compression plates during testing to avoid measurement error.
- Hooks can be supplied as an option for tensile springs.



Optional hooks

Self-levelling plate

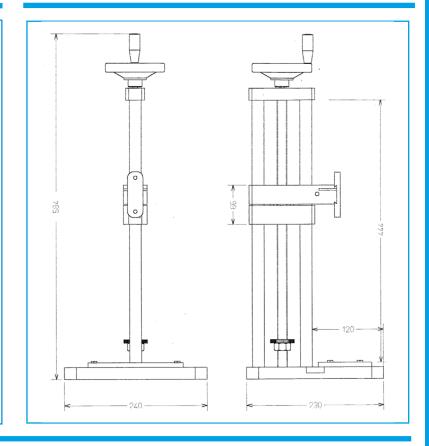


How to measure a spring?

Dimensions

During the first use and periodically, it is necessary to adjust the parallelism between the compression plate and the self levelling plate. To do this, loosen of the self-levelling plate and go down with the compression plate to bring together the two plates. To ensure even greater accuracy and compensate for distortions in the system, it is recommended to apply a force between two plates equivalent to the force measured on your springs. Once this force is reached, lock the self levelling plate by tightening the screws. Then press zero on the displacement sensor.

You can then test all your springs. Simply place the spring on the Springtest I, then turn the handle to go down with the force gauge to have the desired height. Write then the value of the force or transfer this value to your computer.







Certified ISO 9001:2008

COM-TEN Industries

6405 49th Street North Pinellas Park, FL, 33781 - USA

sales@com-ten.com • www.com-ten.com Tel.:+1 727-520-1200 • Fax:+1 727-520-0299