Summary:

The box compression tester is designed for testing compressive strength on corrugated boxes/cartons according to international standards. Compressive strength or compression strength is the capacity of a material to withstand loads tending to reduce size. For finished packages, compression test can be used to measure compressive resistance, deformation and stacking capability.

Principle:

The corrugated box or packaging to be tested must be placed centered in the lower plate of the compression tester. When the test begins, the upper plate will displace downward and a load will begin to be applied to the specimen. This force is captured by means of the three load cells located under the lower plate. When the system detects the sample breaking, the upper plate returns to the initial position at the maximum speed.

Standard:

Industrial Standard: *GB/T4857.4 GB/T4857.16 ISO2872,ASTM D642*

Manufacturing Standard: *GB/T16491,TAPPI-T804,JIS-Z0212*

The Box compression tester is conform ISTA 6 - Amazon.com

Features:

1. Adopting windows platform, and all the parameter settings can be processed in the dialog box, and this compression testing equipment operates easily;
2. Using a single-screen operation; do not need to switch the screen;
3. With three languages in Simplified Chinese, Traditional Chinese and English, the software interface can be switched easily;
4. The pattern of test reports can be self-designated; test data can be displayed directly in the main screen;
5. Choosing translational, comparative mode at the same time to make a number of curve data comparison;
6. With a variety of measurement units, Measure In Imperial & Metric are switchable;
7. With self-return & auto-correction function;
8. With automatic magnification function, in order to achieve the most appropriate size of the graphics;
9. With the user-defined Test methods; with experimental data analysis function;
10. Box compression tester can do test of compression, bending, pressure holding & fatigue.
11. With high precision and accuracy and reasonable price, box compression testing machine can test the crush instantaneously and stop automatically.

Specifications:

Item	COMPUTER CONTROL COMPRESSION TESTER		TOUCH SCREEN CONTROL COMPRESSION TESTER
Model	NG-602A / NG-602A4	NG-602C	NG-602T
Max. Force	1000kg, 2000kg, 3000kg, 5000kg		
Test Space	800*800*800mm / 1000*1000*1000mm / 1200*1200*1200mm / 1500*1500*1500mm (Or Specified)		
Load cell	One Sensor / Four Sensor	One Sensor	One Sensor
Control system	Computer		Touch Screen
Motor	Servo Motor	Inverter Motor	Inverter Motor
Unit(Switchable)	Kgf, lbf, N, kN, kPa, Mpa		
Load resolution	1/250,000	1/100,000	1/100,000
Load accuracy	Within±0.25%	Within±0.5%	Within±0.5%
Test speed	Standard 10 ±3mm/min (0.1~200mm/min adjustable)		

Safety features	E-Stop Over-load protection Upper and lower limit switches Load sensor with automatic retreat

Applications

Computer Control Box Compression Test Machine can make compression tests of packages (boxes) or packing and determine their piling up resistance (for storage and transport). These tests are called B.C.T. (Box Compression Test).

Computer Control Box Compression Test Machine can operate in five ways

1. Deformation under defined load: Test deformation under defined load of various corrugated cartons and beehive crates
2. Load under defined deformation: Test load under defined deformation of various corrugated cartons and beehive crates
3. Maximum load: test the maximum load of various corrugated cartons and beehive crates
4. Stacking test: stack test of various corrugated cartons and beehive crates
5. Cyclic test: dynamic strain according to strength & stroke

Control system

Package Compression Test Machine be equipped with button type microcomputer control test system.so compression testing machine can display screen dynamic, sample deformation, real-time pressure, and the starting pressure. and limit stroke protection, overload protection, and fault clew and other intelligent configuration, to ensure the safety of the user's operation

Force Measurements

Compression test machine adopts Panasonic servo motor, test speed: (0.1-200) mm/min (computer arbitrary adjustment), maximum test Force in 2000KG (20KN) load decomposition in 1/250,000 range, load accuracy: ± 0.25%; unit switch: kgf, IBF, N, kn, T and other units conversion. The upper and lower stroke limit device.

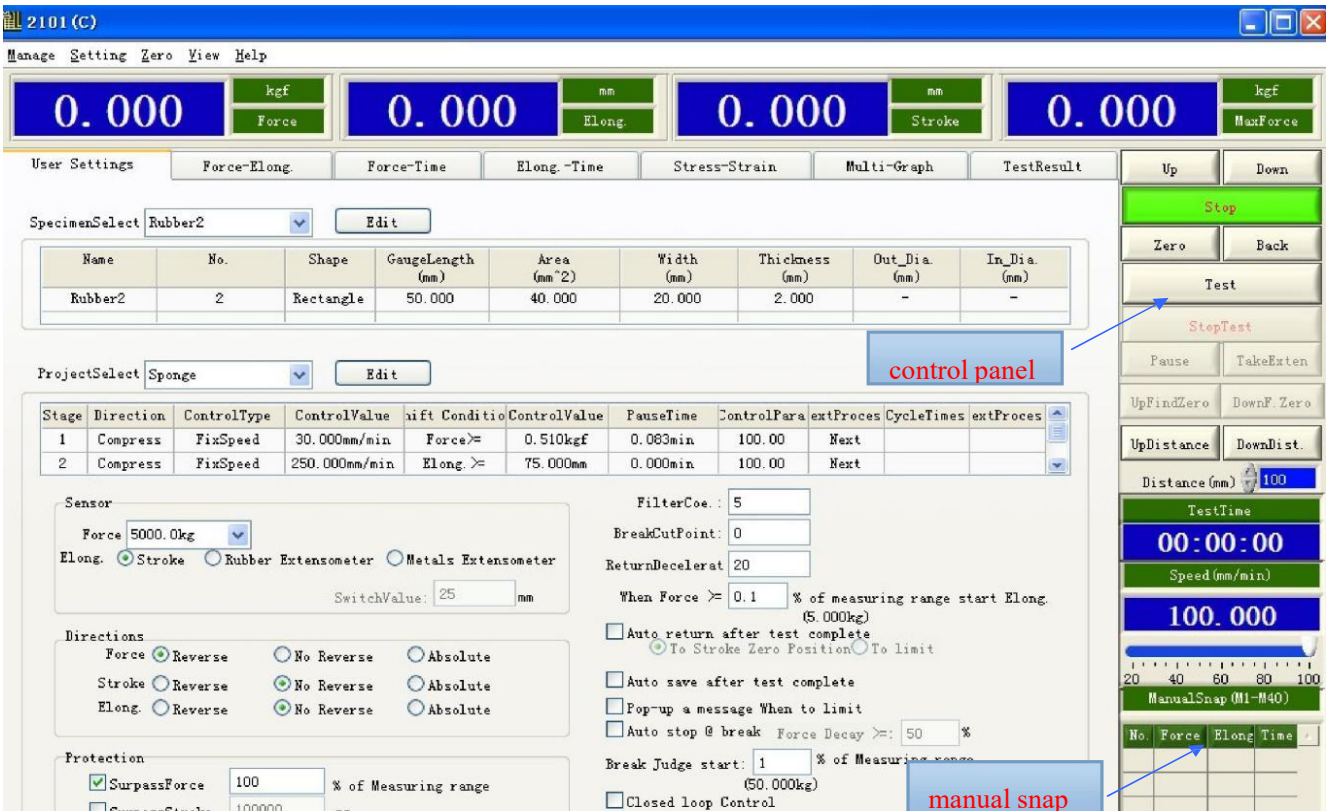
Speed Control

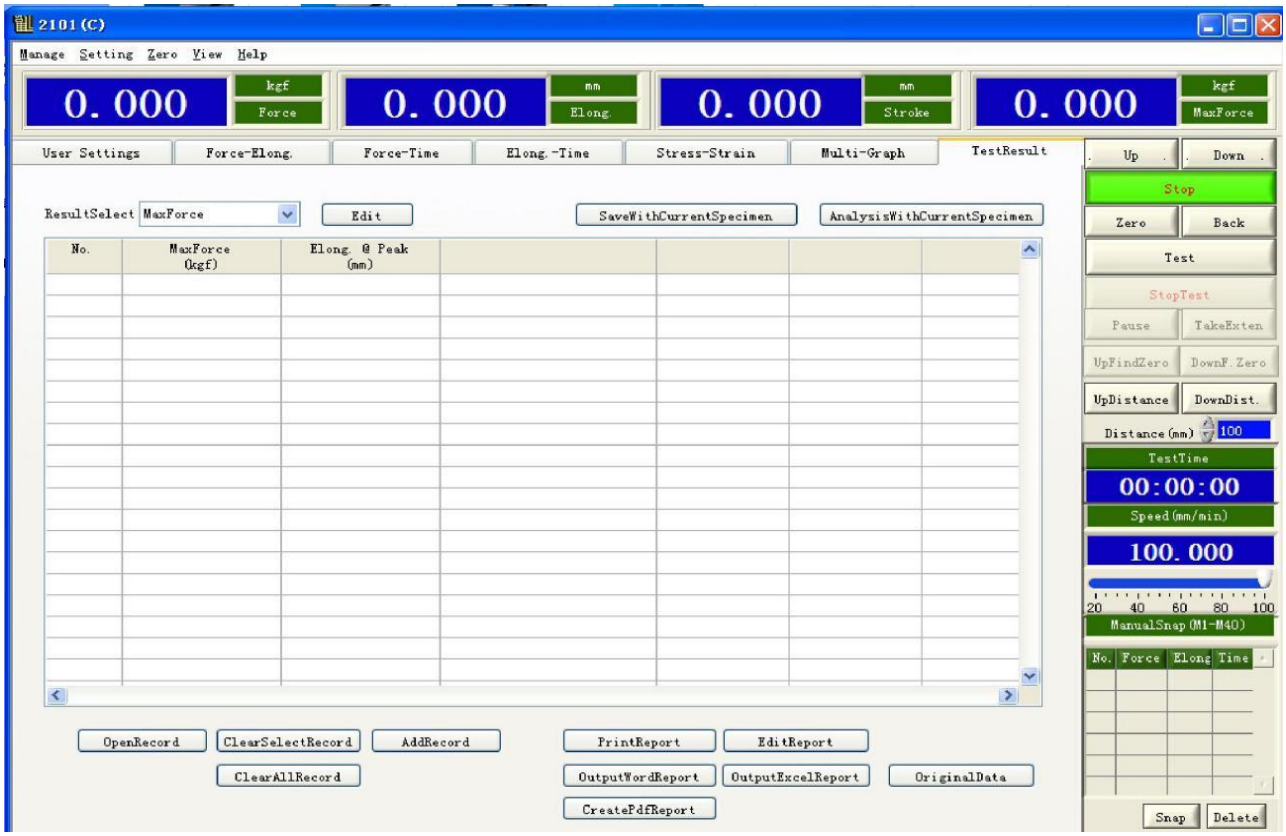
Computer-controlled motherboard touch screen, the computer adopts TM2101 advanced computer system software control, Windows mode operation, accurate test speed range in: (0.1-200) mm/min (computer arbitrary adjustment), load decomposition degree: 1/250,000, load accuracy: ± 0.25%, overload emergency shutdown safety device.

Software

The TM2101 software is designed purposely for computer controlled compression testing machine, used for tension, compress, bend, shear, tearing andpeel test. With the personal computer and interface plate, it could collect, save, process and print test result. Further it can calculate multiple parameters, i.e. maximum force, yield strength, average peel force maximum deformation, yielding point and elastic modulus; this system is featured in curve process, multi-sensor support, image interface, flexible data process and powerful system function.

Main Interface Introduction of Software:

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ResultSelect
MaxForce
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SaveWithCurrentSpecimen
AnalysisWithCurrentSpecimen
No.
MaxForce (kgf)
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ClearSelectRecord
AddRecord
ClearAllRecord
PrintReport
EditReport
OutputWordReport
OutputExcelReport
OriginalData
CreatePdfReport
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