

2018

Universal Testing Machine

www.tech-quality.com Tel. 02-328-6878

Tech Quality Co., Ltd.

BRAVO

Method: COF

Force: 0.00 gf

Static Friction: 0 gf

Kinetic Friction: 0.0000

RealStroke: 0.000 mm

Load(kgf)

Stroke(mm)

10.000 mm/min

Gauge Disp LoadControl

Force

“BRAVO”
is the leading manufacturer of static
material testing instruments in Thailand

Tech Quality Co.,Ltd.

18/1/2018

BRAVO

By Tech Quality Co.,Ltd.



Specification

M100 Machine Capacity : 100KN

Crosshead Speed Range: 0.2-500mm/min

Displacement Resolution : 0.001mm

Crosshead Travel: 1,080 mm

Width Between Columns: 500 mm

Load Cell Accuracy: +/- 0.1% FS

Speed Accuracy: 0.5%

Data Sampling Rate: 10KHz

Operating Temperature 5° to 35°C (41° to 95°F)

Communication : USB & Wireless

Supply Voltage: 230Vac ±10% 50-60 Hz 30Amp

Motor System: Panasonic servo Motor+Servo drive

High Accuracy Ball Screw Type

Weight Approx 1,000kg

Power 220Vac/ 50Hz

Warranty 1 Year

Universal Testing Machine

The **Stealth M100 Series** floor standing Universal Testing Machine are designed to test a wide spectrum of materials including metal wire & foil, plastics, rubber, textiles, paper, yarn, adhesives, ceramics, timber, foods, composites & finished components in tension, compression, flexural or shear . Maximum frame capacities are from 20N to 100KN

In compliance with various international standards, such as ASTM, BS EN, JIS, ISO, IEC, TISI

Features

1. Panasonic servo motor drive set
2. "NTS" Load cell grade 0.05%
3. 10 Point calibration adjustment
4. High Accuracy Ball Screw
5. Force Resolution 1/500,000 FS
6. Force measurement range 0.1% to 100%FS
7. High sampling rate 10KHz.
8. Multi graph display
 - * Load vs Time
 - * Load vs Stroke
 - * Elongation vs Time
 - * Load vs Elongation
 - * Stress vs Strain
 - * Stress vs Stroke
9. Results can be color coded for immediate pass/fail recognition.
10. Automatically sample Height measurement

Simple to use Test Setup

Limit Testing Break Testing Loop Testing Preload Setup Elongation Auto Return, Over Load Protection

Multi-control mode

- Constant speed
- Constant Displacement
- Constant Force
- Constant Stress & Strain
- Multi-step control

Applications

Metal, Plastic, Rubber, Textile, Synthetic, Wire, Cable, Food, Packaging, Autopart, AeroSpace, Woods, etc.

- Seal Strength
- Peel Test
- Bonding Test
- Tensile Strength, Yield Point
- Elongation ,Modulus
- Friction Test
- Spring Test
- Puncture Test
- Shear Test
- Tear Test
- Bending Test
- Food Texture Test
- Top Load Test

Sample Information

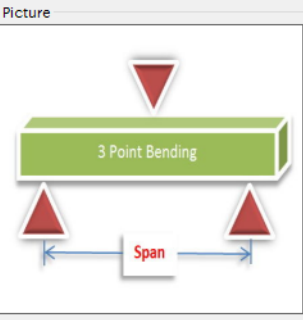
Sample

Shape
 3 Point Bending
 Rectangular
 Annular
 Circular
 3 Point Bending

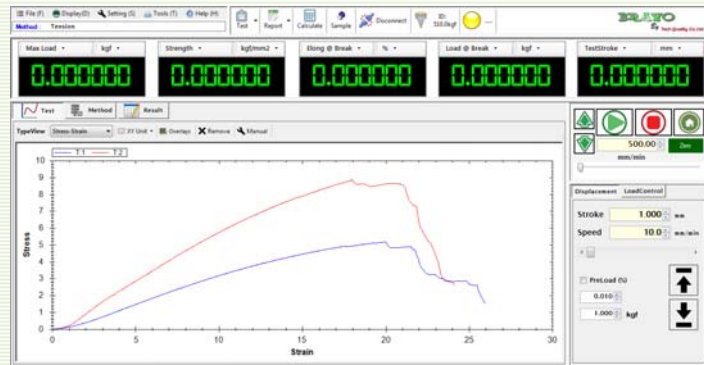
Number
 1 OK Cancel

Parameter(mm)
 Width: 10.000 Thickness: 10.000 ID: 0.0 OD: 0.0
 Gauge Length: 50.000 Diameter: 0.0 Span length: 50.000

Auto Select Tab Number

Picture


Software & Report



Statistic Reports

Template

HOME

New Save SaveAs Report Column Statics Images HeaderAdd Remove

Template Name

Header Value

Min
 Max
 Mean
 SD
 COV

Excel, PDF User design Reports

Tech Quality Co.,Ltd.

Test By: Mr. Nukool Boonklam

Test Standard: ASTM D882 Thin Plastic Sheet

Temperature: 25C

Humidity: 55%

No	Date	Gauge Length (mm)	Thickness (mm)	Width (mm)	Max Load (kgf)	Strength (MPa)	Elong @ Break (%)
T1	28/5/2016	50.0000	10.0000	10.0000	5.1971	0.5206	80.5990
T2	28/5/2016	50.0000	10.0000	10.0000	6.1985	0.6178	13.3092
T3	28/5/2016	50.0000	10.0000	10.0000	5.0239	0.4926	190.4581
T4	28/5/2016	50.0000	10.0000	10.0000	5.0285	0.4931	191.2256
T5	28/5/2016	50.0000	10.0000	10.0000	6.0144	0.5888	118.4042
T6	28/5/2016	50.0000	10.0000	10.0000	6.0216	0.5905	93.9473
T7	28/5/2016	50.0000	10.0000	10.0000	5.0220	0.4925	80.2069
T8	28/5/2016	50.0000	10.0000	10.0000	4.0101	0.3933	85.4156
T9	28/5/2016	50.0000	10.0000	10.0000	6.0088	0.5920	98.4304
T10	28/5/2016	50.0000	10.0000	10.0000	5.1286	0.5203	10.5780
T11	28/5/2016	50.0000	10.0000	10.0000	6.9259	0.6782	9.1414
T12	28/5/2016	50.0000	10.0000	10.0000	7.2116	0.7172	11.6477
Min		50	10	10	4.0101	0.3933	9.1414
Max		50	10	10	7.2116	0.7172	118.5042
Mean		50	10	10	5.9429	0.5526	84.9018
SD		0	0	0	0.9152	0.0887	41.8827
COV		0	0	0	18.2148	18.2145	84.182

Multi-stage testing with BRAVO software

Program Toolbox 1.0.0.4

New Open Save Delete Add Update Verify Remove Templates:

Directions: Compress Speed:Unit 99mm/min Break Type Load Shift <= Target 1:kgf

Step	Direct	Control Break Type	Speed:mm/min	Target:Unit
1	Tensile	PreLoad	1000:mm/min	1:N
2	Tensile	Load	50:mm/min	15:N
3	Tensile	Stroke	300:mm/min	29:mm
4	Tensile	Stress	20:mm/min	10:kgf/mm2
5	Compress	Load	99:mm/min	1:kgf

Multi Display & Decimal Point

Displays Toolbox

Display	Variable	Unit	Decimal
Display 1	Force	kgf	3
Display 2	Max Load	kgf	3
Display 3	RealStroke	mm	3
Display 4	Force	kgf	3
Display 5	RealStroke	mm	6

Force
 RealStroke
 Max Load
 Strain
 Stress
 TestStroke
 Load @ Break
 Elong @ Break
 Elong @ MaxLoad
 Strength

Print Export Export

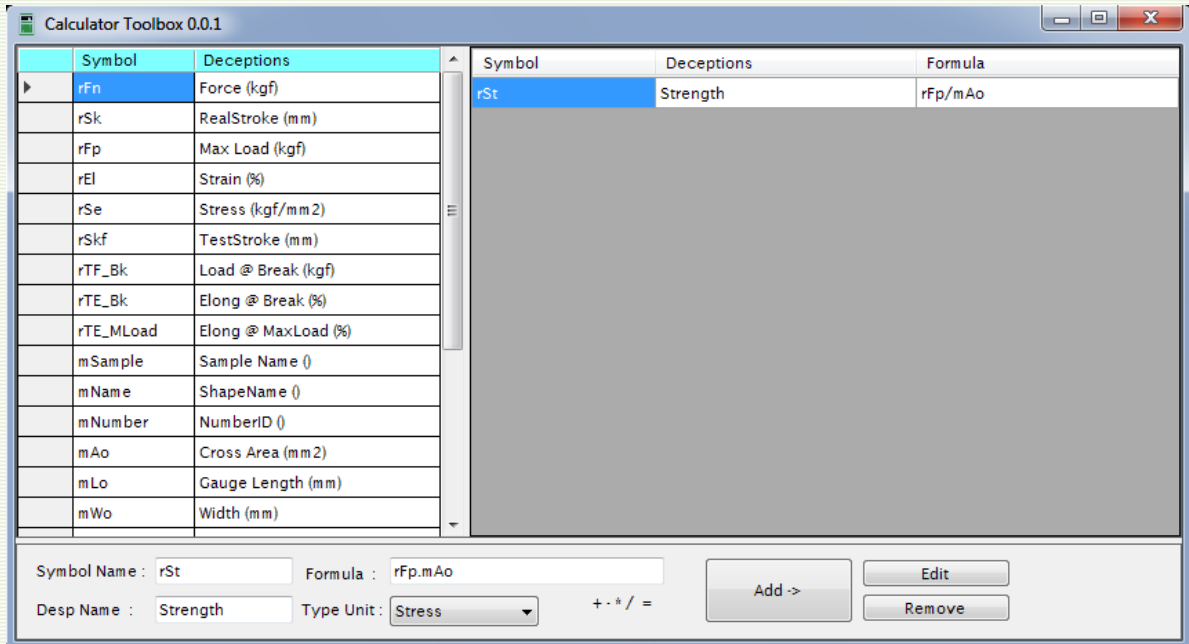
Auto test setup & load protect

Auto Zero before Test Return Speed: 100.0 mm/min

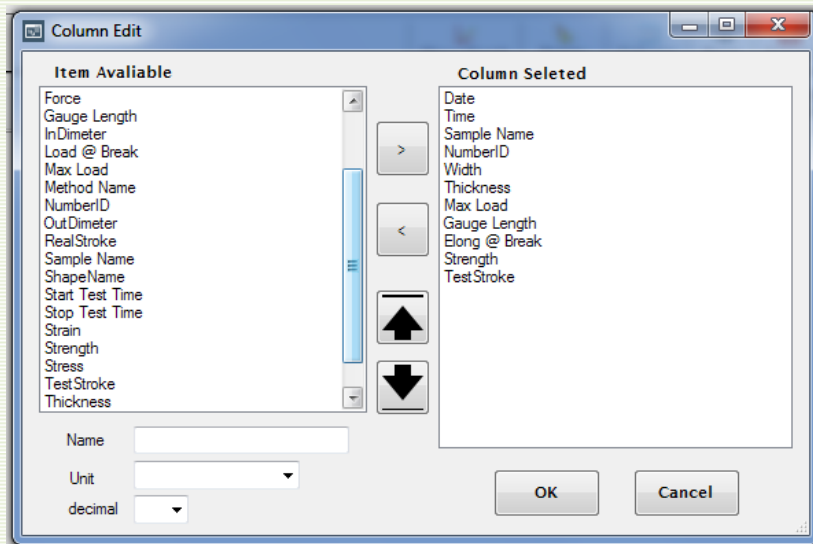
Auto Save after Test Complete Load Protect: 90 %

Auto Return to home after Test 18.00 kgf

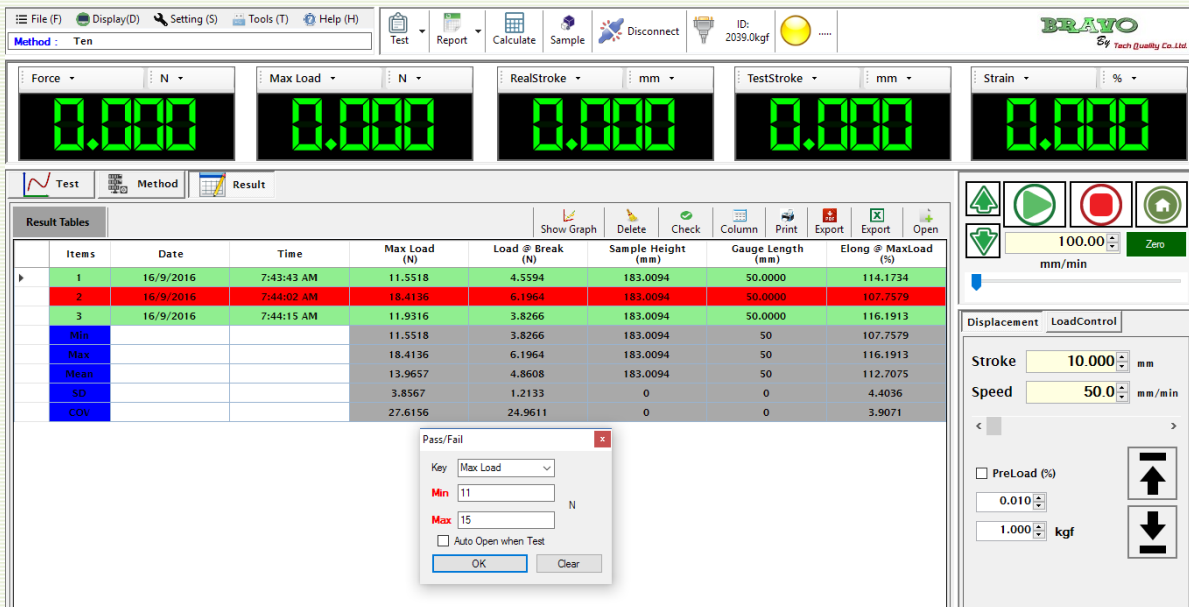
Formula Design by user



Selectable Result



Results can be color coded for immediate pass/fail recognition.



Dimension

