



**BANBROS ENGINEERING PVT. LTD.**

The Precision Measurement People

# COPUTERIZED SPRING TESTING MACHINE



**BCSM-SERIES**

49/39, Site IV Ind Area, Sahibabad, Ghaziabad - 201010,

Uttar Pradesh, India

[www.banbrosindia.com](http://www.banbrosindia.com)



**BANBROS BCSM-Series** electromechanical spring testing machines can perform a wide range of mechanical tests including tensile, compression, bend, peel, tear, friction, and shear testing. These systems are designed to test materials, components, and products in accordance with ASTM, ISO, and other industry standards. Compatible with hundreds of accessories for a wide range of applications, these universal testing systems are available in a multiple sizes and configurations for R&D, QC, and other mechanical testing up to 100 kN force.

**TECHNICAL SPECIFICATION :**

Model No.	BCSM-0.5KN	BCSM-1KN	BCSM-2.5KN	BCSM-5KN	BCSM-10KN	BCSM-25KN	BCSM-50KN	BCSM-100KN
Load capacity	0.5Kn	1Kn	2.5kN	5Kn	10Kn	25Kn	50Kn	100Kn
Load L.C.	0.1N		1N		0.01Kn			0.1Kn
Effective Tensile Space	0-300mm				0-800mm			
Effective Compression space	300mm				800mm			
Testing Speed	Step-less speed of 2.5 to 25mm/min OR 5 to 50mm/min OR 10 to 100mm/min OR 50 to 500mm/min							
Elongation L.C.	0.1mm with digital rotary encoder							
Motor capacity	0.5hp			1hp		2hp	3hp	
Input Power	Single phase 220V 50Hz				Three phase 440V 50Hz			
Safety Feature	Overload Protection			Emergency Stop, Over-travel protection, Over load protection & Auto Break judgement provided with each model				
Design Feature	Heavy duty 'Best in class' twin guided double pillar design for best stability and higher stiffness							

**DIGITAL READ OUT (DAQ), DATA ACQUISITION SYSTEM) :-**

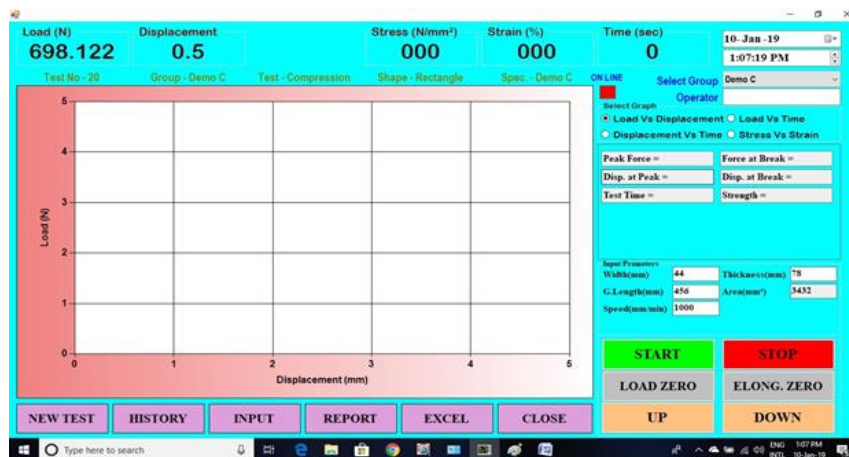
- High Resolution 24 Bit Adc , Ads 1232 Used For A Better Accuracy.
- 2x16 Or 4x20 Dot Matrix Lcd Display For Manual Operation.
- 8 Keys Provided To Easy Manual Operation.
- Load Zero Facility By Key.
- Displacement Zero Facility By Key.
- One Can Make Manual Test With Read Out.
- Peak Load And Peak Displacement Hold Facility.
- Manual Entry Of Speed.
- Auto Calibration Through Daq.
- Over Load Protection.
- Over Displacement Protection
- Extensometer And Rubber Extensometer Facility Optional.



## SOFTWARE SPECIFICATIONS AND FACILITIES :-

- Pc Based Dynamic Software.
- Fully Pc Controlled Software.
- Protection With A Password To Avoid Misuse.
- Real Time Graph.
- Load Vs Displacement Graph.
- Load Vs Time Graph.
- Displacement Vs Time Graph.
- Stress Vs Strain Graph.
- Single Test And Single Report.
- Multi Test And Multi Report.
- Statstical Analyse Of Multi Report.
- Test Report During Test.
- Test Reports Re Call Facility From History.
- Data Back Up And Restore Facility.
- Customer End Report Generation.

### TEST WINDOW



### AFTER A TEST FINISHED





# TEST REPORT

## BANBROS

Test Date	03-Nov-17 2:55:58 PM	Peak Force	33.6 kN
Test No	17	Force at Break	3.8 kN
Specimen	Steel Rod	Elong. at Peak	42.6 mm
Shape	Round	Elong. at Break	78 mm
Reference No:	300	Test Time	8.4 sec
Sample name	rod	Strength	112 N/mm <sup>2</sup>
Party name	Banbros	% Elongation	13
Model No;	1010	Yield Load	32.8 kN
Dia	20 mm	Yield Stress	109.333 N/mm <sup>2</sup>
Length	600 mm	Young's Modulus	175.972
Area	300 mm <sup>2</sup>	Final Area	38.465
		% Reduction Area	87.178

### Load Vs Elongation

