



BANBROS ENGINEERING PVT. LTD.

The Precision Measurement People

SINGLE COLUMN TOUCH SCREEN ELECTRONIC UNIVERSAL TESTING MACHINE



- *VALUE*
- *VERSATILITY*
- *PERFORMANCE*

BSTUM-SERIES



DESCRIPTION:

This machine is a new material testing machine combining electronic technology with software technology and mechanical transmission. It adopts stepper motor as precision power source. It adopts imported precision ball drive screw and guide rod, adopting imported grade 0.5. The precision force value sensor is then accurately measured by a high-precision force value measurement system. This series of models adopts single space structure, which is mainly used for material testing with load less than 10kN. It has firm structure, convenient operation and simple maintenance. It is an ideal test instrument for mechanical testing in various factories and enterprises. It has a wide and accurate loading speed and force range. It has high precision and sensitivity for measurement and control of load, deformation and displacement. It has stress, strain and displacement modes, and can find the maximum force value, tensile strength and bending strength, compression strength, modulus of elasticity, elongation at break, yield strength and other parameters, suitable for tensile, compression, peeling, tearing, shearing, etc. mechanical properties test and analysis.

APPLICATION:

Rubber and plastics, metrological quality inspection, commodity inspection and arbitration, technical supervision department, colleges and universities, scientific research laboratory, basic materials laboratory, metallurgical steel, machinery manufacturing, electronic appliances, automobile production, textile chemical fiber, wire and cable, packaging materials and food, Instrumentation, medical equipment, petrochemical, civil nuclear energy, aerospace, ceramic materials, magnetic materials industry, energy batteries, basic materials.

Application Products:

➤ Plastic	➤ Elastomer	➤ Below medium strength metal
➤ Film	➤ Connector	➤ Oil bearing
➤ Fiber and thin wire	➤ Biomaterials	➤ Ceramic
➤ Adhesive	➤ Wood and paper products	➤ Part
➤ Foam material	➤ Metal foil	➤ Fastener
➤ Tape	➤ Metallic line	➤ Composite material

FEATURES:

- Meet most of the mechanical properties test.
- Completely compact structure, high rigidity design, durable.
- Easy to operate, anyone can operate.
- High accuracy, certified by a third-party testing agency.
- High speed, low vibration, low noise motor drive.
- Multilingual application function, adapt to different countries' using.
- Capabilities with graph, data sheet, report viewing and printing.



- Automatic returning function after test completed.
- Automatic calculation of maximum force, minimum force, average force, maximum deformation, elongation, strength, etc.
- Has a variety of curve modes such as stress- strain, force-displacement, force-time, and intensity-time.
- Has test mode functions such as tensile, flexural, compressive, flexural, adhesive, tear, peel, elongation, etc.
- With mechanical travel switch; emergency stop switch; over current, over voltage, under current, under voltage, leakage overload protection; software overload limit protection; breakpoint shutdown protection and other multiple protection devices.
- Optional: small deformation metal extensometer, large deformation displacement tracker.

TECHNICAL SPECIFICATION:

Model No.		BSTUM -SERIES							
		BSTUM-0.05 KN	BSTUM-0.1 KN	BSTUM-0.2 KN	BSTUM-0.5 KN	BSTUM-1 KN	BSTUM-2 KN	BSTUM-5 KN	BSTUM-10 KN
Capacity	KN	0.05 Kn	0.1 Kn	0.2 Kn	0.5 Kn	1 Kn	2 Kn	5 Kn	10 Kn
	KG	5kg	10kg	20kg	50kg	100kg	200kg	500kg	1000kg
Unit switching		G, Kg, lb, N, KN							
Standard		ASTM, ISO, DIN, GB and other international standards.							
Displacement unit switching		Inch cm mm							
Test machine level		1class							
Effective force range		0.4% ~ 100%FS							
Force accuracy		Within $\pm 0.5\%$							
Force decomposition		1/200 000							
Force Power magnification		X1, X2, X5, X10, X20, X50, X100, etc. Seven-speed automatic shifting							
Displacement resolution		0.05mm							
Displacement accuracy		Within $\pm 1\%$							
Deformation measurement range		2% ~ 100%FS							
Deformation indication accuracy		Within $\pm 1\%$							
Large deformation measurement range		(0 ~ 800)mm							
Large deformation resolution		0.05mm							
Large deformation indication error limit		Within $\pm 1\%$							
Maximum test speed		500mm/min, optional maximum 1000mm/min							



Minimum test speed		0.1mm/min
Speed accuracy		Within $\pm 1\%$
Beam travel height	standard	No grip testing stroke: 920mm
	optional	No grip testing stroke: 1320mm
Fixture configuration		One set of tensile grip, can choose other grips
Returning method		Manual or automatic selection, automatically return after the test ends or manually return to the initial position
Stop method		1. Maximum break value automatically stop 2. Upper and lower limit safety setting stop
Safety devices		1. Mechanical limit switch protection 2. Emergency stop switch emergency brake
Overload protection		Over 10% of maximum load, automatic machine protection
Accessories		1 power cord, 1 manual, 1 certificate
Optional accessories		Anti-splash device (protective door), printer, software
Powder supply		220V.AC/ 50HZ; 110V.AC/60HZ
Main host size/weight		Standard model: Length*Width*Height:450mm*400mm*1160mm / Around 50KG Heightening model: Length*Width*Height:450mm*400mm*1550mm / Around 55KG
Packing size/weight		Standard model: Length*Width*Height:550mm*500mm*1400mm / Around 73KG Heightening model: Length*Width*Height:550mm*500mm*1800mm / Around 78KG

* Banbros reserves the rights of change in above specification due to constant improvement in design.