

Electromechanical Universal Testing Machine

(Touch Screen & Dual Space)

Brand: JNG

Model: JG-1000TS

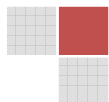
Capacity: 10kN (1000Kgf)



(Photo for reference only)

Introduction

JG-1000TS electromechanical testing machines offer force, displacement or deformation closed loop testing in tension, compression, flexure, shear, tear and peel etc. The machine can be equipped with a variety of accessories including: grips, fixtures, compression frames, thermal cabinets and extensometers covering all relevant applications as testing of rubber, plastics, foils, films, textiles, adhesives, paper, foods, foams, timber, wires or other metallic or non-metallic specimens and medical, electronic and other components.



Application Range

Load meets or exceeds the following standards: ASTM E4, ISO7500-1, EN 10002-2, BS1610, DIN 51221.

Strain measurement meets or exceeds the following standards: ASTM E83, ISO 9513, BS 3846, EN 10002-4.

Safety: This machine shall conform to all relevant European CE Health and Safety Directives EN 50081-1, 580081-1, 73/23/EEC, EN 61010-1

Rigid and Reinforced Plastics/Composite:

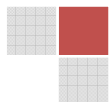
- ✓ EN ISO 6259 - parts 1/2/3 Determination of tensile properties of thermoplastic pipes;
- ✓ EN ISO 527-1 - parts 1/2/3 Determination of tensile properties on plastics;
- ✓ ASTM D638 Standard Test Method for Tensile Properties of Plastics
- ✓ ISO 604 Plastics - determination of compressive properties
- ✓ ASTM D695- Plastics -- Standard Test Method for Compressive Properties of Rigid Plastics
- ✓ EN ISO 9969 Determination of ring stiffness on thermoplastic pipes;
- ✓ ISO 14125 Flexural Properties of Fiber-Reinforced Plastic Composites
- ✓ ASTM D3846 Standard Test Method for In-Plane Shear Strength of Reinforced Plastics;
- ✓ EN ISO 13968 Plastics piping and ducting systems -Thermoplastics pipes- Determination of ring flexibility;
- ✓ EN ISO 844 Determination of compression properties;

Geo-textiles:

- ✓ BS EN ISO 10319 Geotextiles —Wide-width tensile test;
- ✓ ASTM D3950 Standard Specification for Strapping, Nonmetallic (and Joining Methods);
- ✓ JBT 8521(EN 1492-2): Textile slings. Safety. Round slings, made of man-made fibers, for general purpose use;
- ✓ ASTM D 6775-02 Standard Test Method for Breaking Strength and Elongation of Textile Webbing, Tape and Braided Material;

Metal:

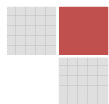
- ✓ ASTM E8 Standard Test Methods for Tension Testing of Metallic Materials;
- ✓ ISO 6892 Metallic materials — Tensile testing — Method of test at ambient temperature;
- ✓ BS EN 10002-1Determination of tensile properties on metals;
- ✓ BS EN 10002-5: Metallic materials —Part 5: Method of test at elevated temperatures;
- ✓ ASTM E21: Standard Test Methods for Elevated Temperature Tension Tests of Metallic Materials;



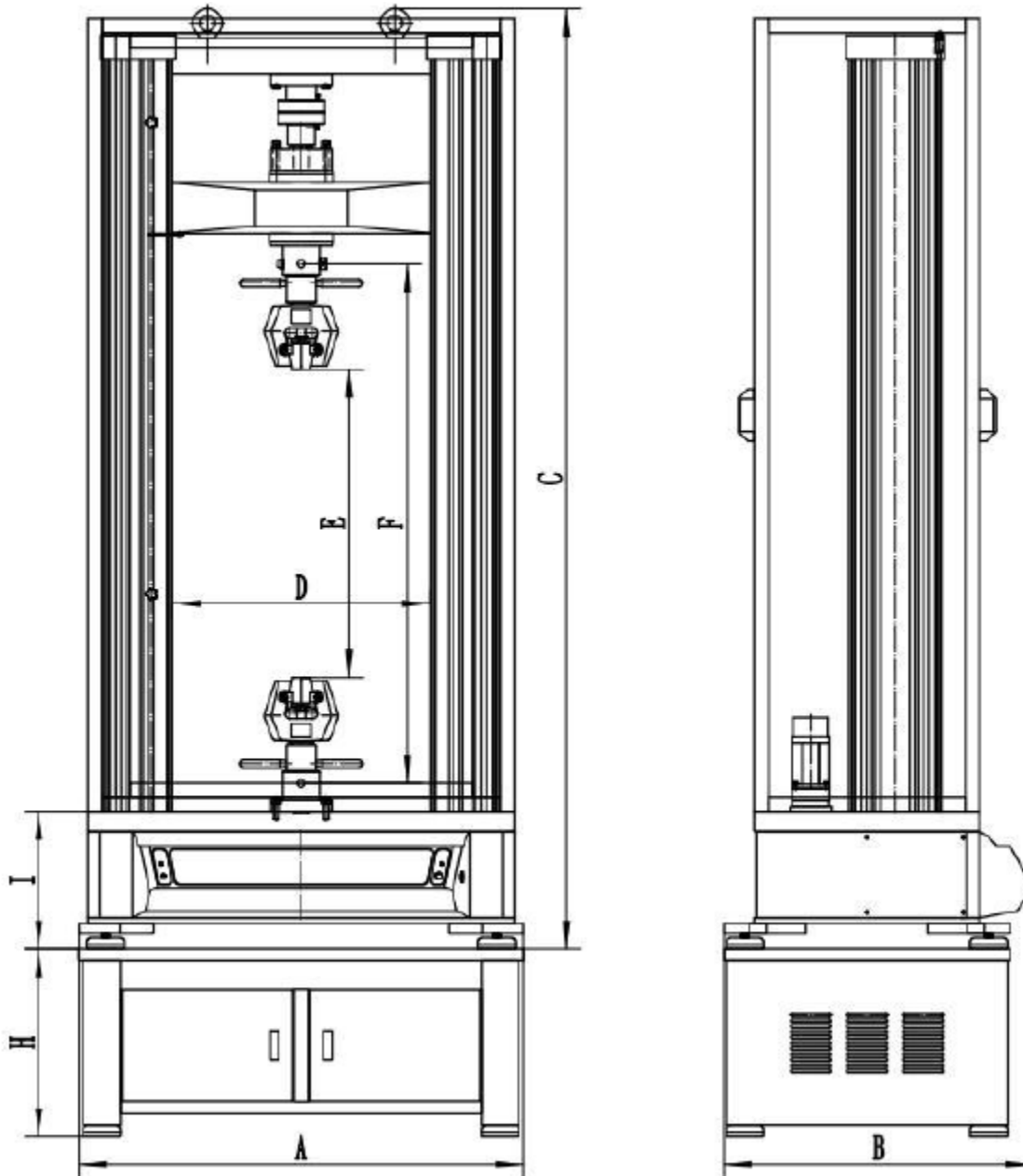
- ✓ ISO 783: Metallic materials -Tensile testing at elevated temperature;
- ✓ EN ISO 7438 Determination of flexure tests on metals;
- ✓ ASTM F606: Standard Test Methods for Determining the Mechanical Properties of Externally and Internally Threaded Fasteners, Washers, Direct Tension Indicators, and Rivets;
- ✓ ISO 14589: Blind rivets - Mechanical testing;
- ✓ SAE J429: Mechanical and Material Requirements for Externally Threaded Fastener;

Specifications

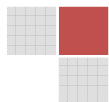
MODEL	JG-1000TS
Load Capacity	10KN
Calibration Standard	Class 0.5 according to ISO 7500-1 – Meets ASTM E-4
Testing Load Accuracy	±0.5%
Testing Load Range	0.4%-100%FS
Load Resolution	1/500,000FS
Deformation Measuring Range	0.2%-100%FS
Deformation Accuracy	≤±0.5%
Deformation Resolution	1/±500000FS of the max deformation
Position Accuracy	Within ±0.5% of the value
Displacement Resolution	0.04µm
Crosshead Speed Range	0.00-1000mm/min
Crosshead Speed Accuracy	±0.5% of the set speed
Crosshead Travel	1100mm
Max. Tensile Testing Space	770mm
Max. Compression Testing Space	770mm
Test Width	450mm
Compression Platen	Ø100mm
Position Limit Switch	Upper and lower lights
Power Supply	0.75KW, AC220V±10%, 50Hz/60Hz










Overall Dimensions (L*W*H)	850x585x1824mm
Weight	420kg

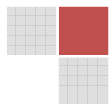




Model	E-Test Space	Width*Depth*Height AxBxC	F- Crosshead Travel	D-Test Width	Weight
JG-1000TS	770mm	850x585x1840mm	1100mm	450mm	420kg



Machine Standard Accessories

Part Name	Picture	Details	Quantity
Electronic Universal Testing Machine JG-1000TS		10KN, 4 column 2 ball screw frame structure Double space (Down tensile, up compression or up tensile down compression)	1 set
AC Servo Control System			1 set
Reducer Gear			1 set
Rubber Shock-Absorbing Pad		Effectively adjust the level of the equipment, reduce the vibration of the equipment during the test	4 set
10KN Load Cell		Calibration within 0.5% accuracy can be carried out as per ASTM E4, ISO7500-1, EN 10002-2, BS1610, DIN 51221 standards	1 set
Wedge Tensile Grip		Insert for flat specimen Thick: 0-6mm	1 set
Compression Test Grip		Ø100mm	1 set



Touch Screen Control Software		Force, displacement and deformation closed loop control	1 set
Micro Printer		Can print max load, deformation, speed, test date, load-time curve etc	1 set

Features of the Machine

Machine cover : All aluminum alloy surface special treatment, beautiful and generous, moisture-proof, rust-proof, long-term use without discoloration

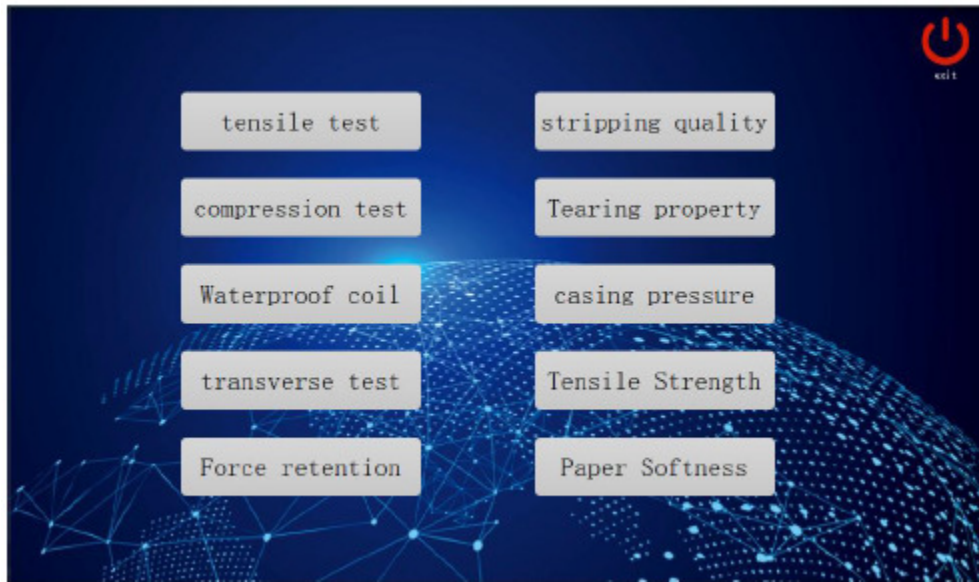
High stiffness middle beam : used to adjust the test space, the important stress position, coaxial adjustment device used to adjust the coaxiality of the upper and lower fixture and improve the fracture alignment of the specimen



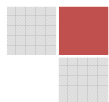
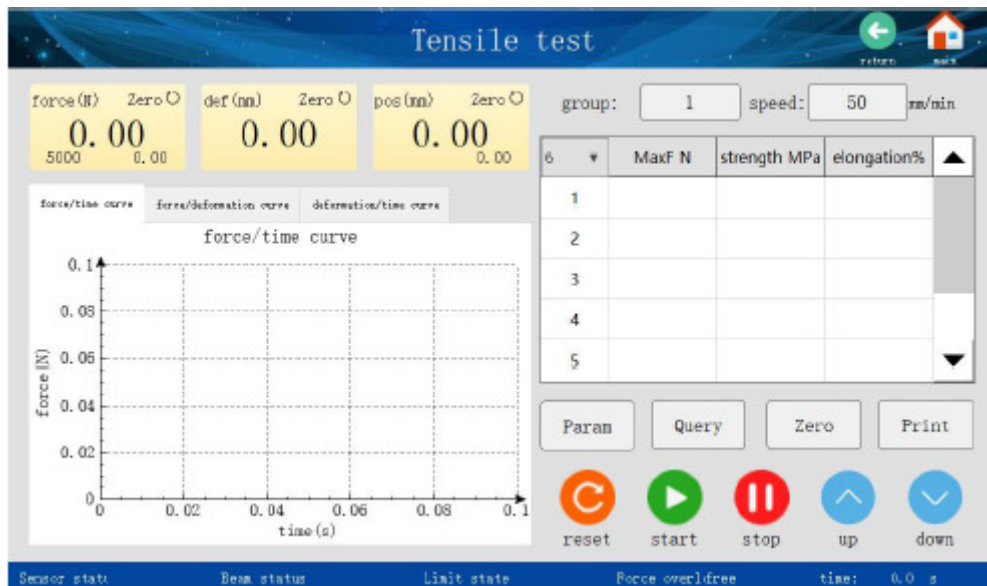
Installation of indicator ruler : for real-time observation of the position of moving beam The limit switch adopts the built-in installation mode, the outside adopts the limit adjusting rod and the position locking knob, has the strong sensitivity. Safe and reliable.



Touch Screen Features



Tensile Test Interface



Testing Parameter Set

Parameter

return
home

1:number	<input type="text" value="1"/>	10:reset wait time	<input type="text" value="0"/> S	19:Cross section	rectangl▼
2:sensor number	<input type="text" value="1"/> 1-2	11:reset draw curv	No ▼	20:Width	<input type="text" value="10"/> mm
3>Loading mode	dis loading ▼	12:Break point	<input type="text" value="5"/> *	21:Thickness	<input type="text" value="10"/> mm
4:preload speed	<input type="text" value="50"/> mm/min	13:Original scale	<input type="text" value="10"/> mm	22:Radius outer	<input type="text" value="20"/> mm
5:Return speed	<input type="text" value="50"/> mm/min	14:Stretching meth	Break ▼	23:inner radius	<input type="text" value="10"/> mm
6:up speed	<input type="text" value="50"/> mm/min	15:Stopping force	<input type="text" value="0"/> *	24:Radius	<input type="text" value="10"/> mm
7:down speed	<input type="text" value="50"/> mm/min	16:Stop deformatio	<input type="text" value="0"/> mm	25:Irregular secti	<input type="text" value="10"/> mm*
8:Starting force	<input type="text" value="5"/> *	17:Break comparisc	MaxForce ▼		
9:End return	No ▼	18:Break judgment	<input type="text" value="70"/> *		

Sensor stati
Beam status
Limit state
CS&: 100.00

Compression Test Interface

Compression test

return
home

force(N) Zero 0

0.00

5000 0.00

def(mm) Zero 0

0.00

pos(mm) Zero 0

0.00

0.00

group:
speed: mm/min

6 ▼	Maxf N	pressure MPa	def(mm) ▲
1			
2			
3			
4			
5			

force/time curve
force/deformation curve
deformation/time curve

force/time curve

Sensor stati
Beam status
Limit state
Force overlfree
time: 0.0 s



Print Interface

Print ← return 🏠 exit

Test result
date: 2023-06-20 15:31:05
speed: 50mm/min
group: 1

num...	MaxF N	strength MPa	elongation%
1			
2			
3			
4			
5			
6			
mean			

force/time curve

print type:

Sensor stati Bean status limit state

