

# **Universal Material Testing Machine**



This tester is designed for conduct tensile, compression, bending, shearing, bonding strength, peeling, tearing and other tests for rubber, plastic, leather, metal, nylon line, fabric, paper, aviation, packaging, construction, petrifaction, electrician, vehicle and other materials. It is a basic equipment of quality control, receiving inspection, physical test, mechanics research, material development.

Specification	SM-300	SM-200	SM-100	SM-50	SM-20	SM-10
Order#	752-161	752-151	752 - 141	752 - 131	752 - 121	752-111
Max. Capacity	300KN	200KN	100KN	50KN	20KN	10KN
Test Speed (mm/min)	0.005~500	0.005~500	0.005~500	0.005~500	0.005~500	0.005~500
Travel(exclude the grips)	1000mm	1000mm	1000mm	800mm	800mm	800mm
Effective Width	550mm	550mm	550mm	420mm	350mm	350mm
Software	Closed loop control software					
Force Unit Switch	Kgf, N, KN, Lbf, Lbf/in², Kgf/mm², Mpa					
Load Magnifying Rate	No-segment No-segment					
Force Resolution	1/500,000					
Force Accuracy	±0.25%					
Travel Resolution	0.001 mm					
Speed Accuracy	±0.5%					
Transminsion haulm	High accuracy of ball screw					
Motor Power	400 W					
Standard Delivery	Instrument ,Grip(#753-011) PC, Measuring Software: Tester					
Optional Accessories	Grips, PC					
Dimension(mm)	1080×950×2200	800×700×2400	1080×950×2000	850×520×1300	850×520×1300	850×520×1300
Weight	950kg	900kg	850kg	600kg	200kg	135kg
PowerSupply	AC220V /50Hz/15A					





SG-001(#753-011) Max load:50KN Usage: Challis, braided fabric, tensile experiments



S G-002(#753-021)
Max load:30KN
Usage: All kinds of metal and non-metal materials tensile experiments



SG-003(#753-031) Max load:300KN Usage: All kinds of metal and non-metal materials tensile experiments



SG-004(#753-041) Max load:0.5KN Usage: Plastic , thin film, leather etc. tensile experiments



SG-005(#753-051) Max load:1KN Usage: Plastic , thin film, leather etc. tensile experiments



SG-006(#753-061) Maxload:3KN Usage:Silk, thread ,rope and metal wire etc. tensile experiment



S G-007 (#753-071)

Max load: 600 KN

Usage: All kinds of metal and non-metal materials tensile experiments



SG-008(#753-081)
Max load:5KN
Usage: Engineering Plastics,
strength of wood tensile
experiments



SG-009(#753-091)
Maxload:1KN
Usage:Thinfilm, paper and leather etc. tensile
experiments



SG-010(#753-111) Max load:2KN Usage: challis, braided fabric tensile experiments



SG-011(#753-121)
Max load:3KN
Usage: Cloth, woven materials
tensile and peeling experiment



SG-012(#753-131) Max load:20KN Usage: safety rope, steel hook, go-between tensile experiments



SG-013(#753-141) Maxload:200KN Usage:200mm broadband tensile experiments



SG-014(#753-151) Max load:5KN Usage:All kinds of wire and thread tensile experiments



SG-015(#753-161)
Maxload:5KN
Usage: Silk, thread ,rope and metal wire etc. tensile experiment



SG-016(#753-171)
Max load:300KN
Usage:
All kinds of material
compression experiments



SG-017(#753-181)
Maxload:30KN
Usage:
All kinds of material
compression experiments



SG-018(#753-191) Maxload:100KN Usage: All kinds of material high temperature performance experiments

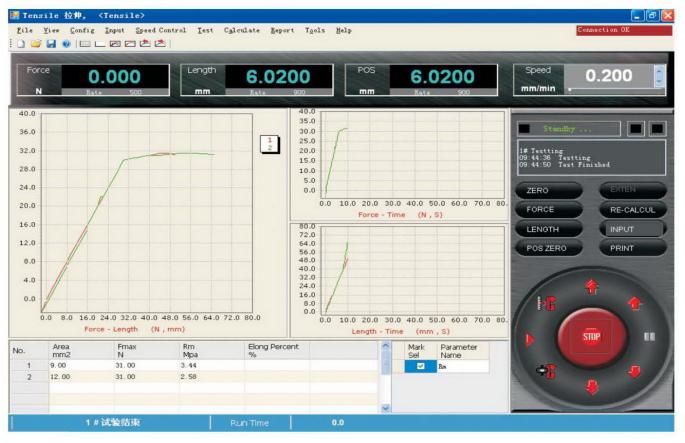


SG-019{#753-211} Max load:300KN Usage: All kinds of material three Points bending experiments



SG-020(#753-221)
Max load:20KN
Usage:
Geotextile bursting
strength experiment





## **Software Function:**

Test & Control System is designed for PC Electronic Universal Testing Machines, PC Hydraulic Universal Testing Machine PC Compression testers; can conduct tensile, compression, bending, shearing, tearing and peeling test; use PC and interport to data collection, preservation, processing and printing test result; can calculate max force, yield strength, averageling force, max deformation, yield point, elastic modulus and other parameters; can conduct curve graphics procedulti-sensor support, video and image interface, flexible data processing, MS-ACCESS database support, making powerful function of system. Software Protection: over stroke, over capacity protection.



#### Main interface:

In this main interface, where you can select the language and testing standards, it includes 10 languages and 7 test standards.



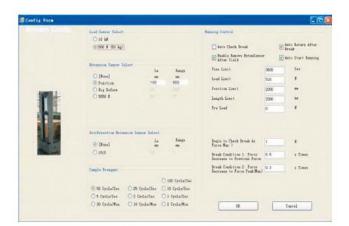
#### Main form:

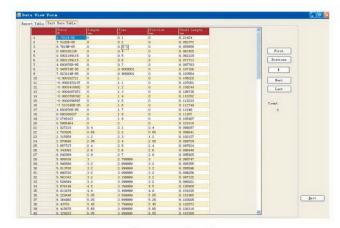
The main form includes menu bar, shortcut key bar, realvalue display, curve chart display, result display, state d information display and key parts;



### **Features**

- Image interface: It so convenient for operation and can be reduced the misoperation through voice prompt to promote the reliability.
- MS-ACCESS database technology and SQL technology: It can standardize the saving and processing of data to facilitate
  the connection with Intranet or Internet; and the connection with Office software as Word or Excel; besides, the user
  can read the original testing data through standard database.
- Modularized program designing: Crystal Reporter report system and expanded customized report of VBScript and automatic calculation function of parameters can implement secondary development of users, so it can realize other testing functions excluding for tension, compression, tearing, peel and shear provided by software package.
- Function of curve chart: The real-time curve chart and coordinate axes of the chart can be selected the parameter' s type, theoretically, there are 169 types of curve charts, which can display the parameters.
- Multi-sensor support: It can support 5 force sensors, 5 deformed sensors + large deformation + displacement, which substantially expand the testing range.





System config

Curve chart



Data report