Metrix+™
Innovative Excellence

SCREEN TENSION TESTER

STM 01

Measure mesh and screen tension

Measuring principle

This works on the principle of spring loaded balance, and its resistance when pressed on a sample. With the resistant force measured, the wire mesh tension of the sample can be estimated.

Applications

Woven wire mesh is common for most screen printing applications. Screen Testion Meter is useful for production of precise screen and steel mesh. For eg. if the screen tension is not uniform, it will affect the printing quality leading to non-uniform printing. This is a critical testing tool suitable for wire mesh, steel mesh, ultra high tension wire mesh, high precision polyester net, nylon mesh, etc.

Features

- Measurement range upto 40N/cm
- Sturdy sensor with calibration plate included for easy calibration
- Backlit display
- Auto power off







Technical Specifications

Model	*Metrix+* STM 01
Range	7 ~ 40N/cm
Resolution	0.1
Accuracy	5%
Power	4 x 1.5V AAA batteries
Features	backlit display, low battery indication, auto power off
Operating	Temp: 0~50C, Humidity <80% RH
Dimensions	Main unit: 175 x 95 x 40mm, approx. 490g
Std accessories	Main unit, calibration plate, manual, case
Optional accessories	Data logging PC interface(USB & software), Bluetooth

Printing task and determination of screen tension*

Wire Mesh	Printing Task	Tension(N/cm)
Ultra High Tension Wire Mesh	Circuit Board and Measuring Scale	16~20
High Strength Wire Mesh	Multicolor and Four-Color Printing (Mechanical Printing)	16~20
High Precision Ultra Fine Wire Mesh	High Precision Multi Layer Circuit Printing	25~30
High Precision Polyester Net (Standard Monofilament)	Multicolor and Four-Color Printing (Manual Printing)	8~12

Wire Mesh	Printing Task	Tension(N/cm)
Ordinary Polyester Net (Standard Monofilament)	Flat Object	8~12
Nylon Mesh	Curve Surface or Rough Object	8~12

based on standard testing

Commonly Used Screen Maximum Tension

Data in the table is based on testing condition of Swiss thick gauze. Concrete data depends on the quality of network machine. With good quality network machine, the gauze will not crack even in the highest tension. but if it exceeds the maximum tension, the gauze cracks easily, please reference when trapping net.

		Maximum Tension	Regulating Pressure
77T	200 mesh	30N/cm	7kg/cm
90T	230 mesh	25N/cm	6.5kg/cm
100T	250 mesh	23N/cm	6kg/cm
120T	300 mesh	21N/cm	5.7kg/cm
140T	350 mesh	20N/cm	5.3kg/cm
165T	420 mesh	18N/cm	5kg/cm

Note: The above data is the reference data in the use of a factory pneumatic net machine, the specific operation according to actual circumstances.

Model and Specifications subject to change without notice.