

# TensoMaster

**Generic Name** : Automatic Single Yarn Strength Tester  
**Product #** : MAG – Y1371 **Test Category** : Yarn  
**Industry Usage** : Spinning, Weaving & Knitting

TEXTILE  
TESTING  
SOLUTIONS

**Features :**

- Determine the tensile properties of all kinds of yarn.
- Constant Rate of Extension (CRE) principle.
- Fully automated operations with pneumatic control ensure accurate results.
- Accommodates 20 packages and Simultaneous sample preparation methodology for faster testing.
- State of the art, ICM system with latest ARM based microcontroller.
- Automatic and quick returning of lower jaw to home position after completion of each test.
- Foldable Cone / Cop stand for easy storage and transportation.
- Built-in self-diagnostic test facility.
- Selectable force unit: cN and gf;  
Selectable elongation unit: mm, inch and %.
- Computer connectivity port for data transfer and presentation.
- Supplied along with "Power supply Isolation module" for protection from Surge, Spikes and Earth related issues.



## TECHNICAL DATA

**Capacity** : Breaking Force : 50 Newton (Optional 100 N and 500 N)  
**Package Truck Capacity** : 20 Cops / Cones  
**Elongation Range** : 100 % for 500 mm Sample Length ; 900 % for 100 mm Sample Length  
 400 % for 200 mm Sample Length  
**Testing Speed** : 50 to 5000 mm/min.  
**Sample Length** : 100 to 500 mm (In steps of 1 mm)  
**Pre-tension** : Auto pre-tension considering the Count selected  
**Numerical Results** : Breaking Force, Elongation, RKM value, Time to Break and Work done  
**Graphical Results** : Force-Elongation curve, Stroke diagram and Frequency Distribution curve  
**Calibration** : Multipoint – Standard Mass  
**Compressed Air Supply** : 21 m<sup>3</sup> / hour at 6 to 7 bar dried and filtered air  
**Power Supply** : Single phase 220vAC @ 50Hz; Consumption : 1000 vA  
**Applicable Standard(s)** : ASTM D2256, ISO 2062 & IS 1671  
**Physical Dimensions** : Instrument : Size (WDH) : 695 x 600 x 1600 mm; Weight : 225 kg  
 Yarn stand : Size (WDH) : 300 x 450 x 1780 mm; Weight : 25 kg

## SCOPE OF SUPPLY

- 1) **Main Unit** : - 1 No.
- 2) **Accessories** : All in One PC - 1 No., Keyboard and Mouse - 1 No., Laser Printer - 1 No., Mains cord - 1 No.  
 Inlet Air tube (3m) - 1 No., Yarn stand - 1 No., software CD - 1 No.,  
 Isolation transformer (1.5 KVA) - 1 No., Instrument Communication cable (1.5 Meter) – 1 No.  
 "USB " 2 port with Interface cable - 1 No., Yarn cutter - 1 No. and Calibrated weight - 1 No.
- 3) **Spares** : Jaw grips – 1 set (2 Nos.)
- 4) **Documents** : User's guide with Warranty certificate, Test certificate & Calibration certificate.

**Optional Supply** : Online Sine-wave UPS

## PRE-REQUISITES FOR INSTALLATION

Properly earthed and Stabilized Single phase 220vAC @ 50Hz ported at 15 Amps supply socket, Laboratory standard compressed Air supply at 6.0 bar, PC table (Size of 3 x 3 x 3 Feet) Test samples and Suitably qualified operator.

## OTHER AVAILABLE MODELS

**TensoLite**