

TETKO MAT – Screen Tension Gauges (Mechanical Screen Printing for Mesh)



Product Definition:

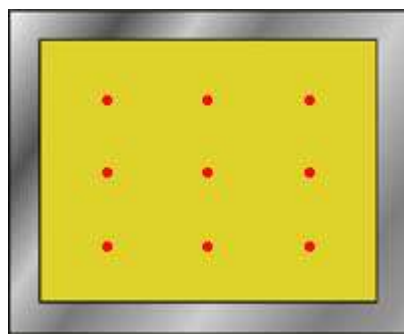
The STG Series Screen Tension Meter is designed to measure how taut a woven material is when tension has been applied in two directions at right angles to each other, as in the case of a screen printing frame.

Its operating principle is similar to Durometers, except that it is fitted with a one-inch bar indenter placed midway between two outer "reference" bars spaced two inches apart, instead of an indenter ball. When the instrument is placed on the material, the greater the tension, the more the bar will be pushed in, and the greater the reading on the scale.

Optimum tension levels are the key obtaining the maximum performance of the mesh:

- Improved print quality
- Consistent registration print after print.
- Longer screen life by avoiding over tensioned screens.

Optimum Tensions: The optimum mesh tension is mesh specific. Each mesh count and its specific thread type has an optimum tension level. Optimum tensions can also be viewed as 'workable tensions'. Mesh stretched to the upper limits shown in the mesh chart require very careful handling. The highest tension level for a given mesh count is the tension level that the mesh will begin to stall at, applying more stretch forces may not achieve more tension. Stretching higher than the recommended tension level creates an unstable screen that is subject to accidental breakage. Typical apparel shops do not handle screens well as they get banged around during cleaning and reclaiming. A workable tension for apparel shops should take into account how fine mesh screens are handled and lower tensions to the middle of the recommended tension levels or lower to preserve the screens.



Measuring Tension: The graphic to the above shows the nine points to measure mesh tension. The tension meter should be placed on a dot area square to the frame. Check tension in both directions of the frame by turning the tension meter 90 degrees on each dot. Registration and print quality are optimum when all 9 dots have a similar tension level within 1-2 newtons.

Technical Specification:

Model	STG-50N	STG-80N
Country Origin	Gauge – Switzerland Base & Gauge Design – China	
Measurement Range	7 – 50 N/cm	7 – 80 N/cm
Accuracy	±5%	
Dimension of Equipment	108 x 76 x 44 mm	
Weight	500g	
Standard Accessories	Zero Setting Glass Plate, Carrying Case	

Image References:

