



# MIT Folding Endurance Tester

When using these machines, a pliable specimen is placed under a constant tension load. The specimen is then folded to an angle of 135° in either direction, at the rate of 175 double folds per

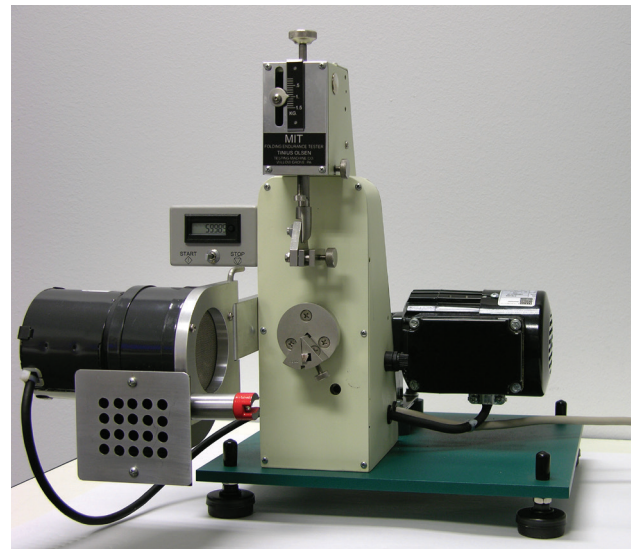
minute until the specimen is severed at the crease.

A variable folding rate option allows the operator to vary the folding rate between 20 and 175 double folds per minute.

## Three models to meet requirements

- **Model 1** – For paper, leather, fine wire and other pliable materials with comparatively low elongation characteristics. This machine accepts standard 14cm long by 15mm wide specimens. Holding jaws are available that will accept specimens varying in thickness from 0.01-0.07 in. Jaw size(s) required should be stated when ordering. The optional centrifugal exhaust fan draws conditioned room air across the specimen and the head to accurately control the temperature and humidity in the fold area, in accordance with TAPPI Method T 511 and ASTM D2176.
- **Model 2** – For plastics and other materials with relatively high amounts of elongation, this machine provides the same operating principles and holding jaw options as Model 1. However, the loading system has been modified to automatically compensate for specimen elongation up to 100% on a 1in gage length. Loads of any desired magnitude from ½-5lb in increments of ½lb can be applied with full assurance of uniformity throughout the test. Compliant with ASTM D2176 & TAPPI Method T511 standards for high elongation materials.

**Model 2 Folding Endurance Tester with modified loading system, digital counter and variable speed drive for use on materials with relatively high amounts of elongation**



**Model 1 Folding Endurance Tester for paper with optional exhaust fan for testing in accordance with ASTM D2176 and TAPPI T 511**

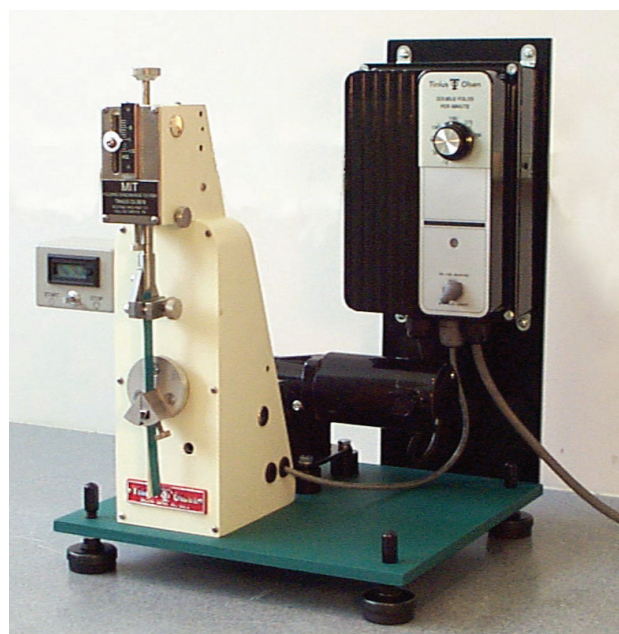


SPECIFICATIONS		
Specimen	mm	15x150
Counter		0-999,999
Load precision	%	±0.5
Folding angle	°	135±0.5°, 90±0.5°
Speed	cpm	175±10
Width of folding head	mm	19±1
Arc radius of folding surface	mm	0.25±0.02, 0.38±0.02, 3.5±0.02
Clamping thickness of folding head	mm	0.25, 0.5, 0.75, 1.0, 1.25
Dimension (WxD)	mm	450 x 390
Height	mm	520
Weight	kg	22
	lb	48.5
Power	220V, 50/60Hz, 3A (please specify if different when ordering)	
CE Mark	Conforms to all applicable CE directives	

## Key features

- Automatically test folding endurance properties of wide range of materials.
- Three different models
- Provides constant tension load
- Variable folding rates from 20 to 175 double folds per minute can be furnished
- Test paper, plastic, leather, wire and other pliable materials

- **Model 3 Combination Paper and Plastics Tester** – For maximum flexibility in testing both paper and plastic specimens, this versatile folding endurance tester incorporates the features and capacities of both Models 1 and 2, as described above, in a single unit.



Model 1 Folding Endurance Tester with variable speed control



# MIT

## Folding Endurance Tester

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