

# LAB MASTER® LOOP TACK TESTER

## 80-94



The **Lab Master® Loop Tack Tester** is designed for precise measurement of adhesion, tack, quick stick and cohesion. Force is measured to 0.1 gram resolution and 0.02% full scale accuracy. Thousands of data points per test are used to generate force/distance curves that reveal material behavior during test.

### APPLICATIONS

Adhesives, Tapes and Pressure Sensitive Labels

### SPECIFICATIONS

#### Force

- Range & Resolution 2270 gf × 0.1 gf
- Measurement Accuracy ±0.5 gf or 0.5% of reading
- Control Accuracy ±0.68 gf steady state Position
- Range & Resolution 160 mm × 0.1µm
- Measurement Accuracy ±1.0 µm, ±1.0 µm/60mm

### FEATURES

- User-selectable contact pressure, position, rate of separation and duration of test
- Display test results as numbers and curves
- Configure for R&D analysis or one-touch automated process control
- RS-232 output
- Includes Windows operating system and touchscreen flat panel display in a compact, network ready unit
- Innovative design (patent pending) maintains accuracy over changing loads and frequent use.

### ORDERING INFORMATION

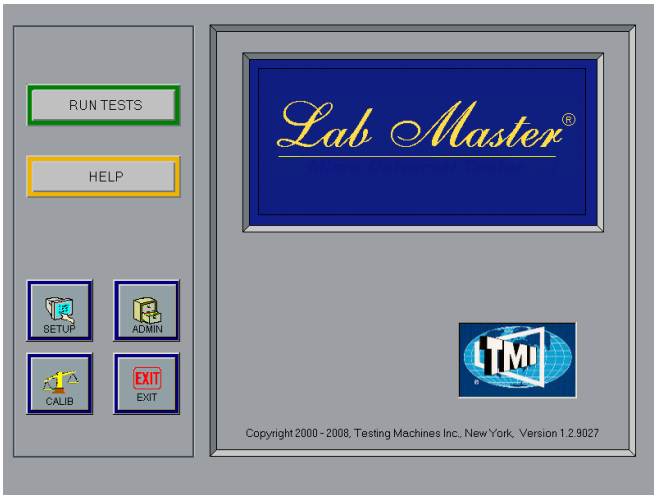
Model number 80-94-00-0001

# LAB MASTER® LOOP TACK TESTER

## STANDARDS

ASTM D 6195 Loop Tack	Standard Test Methods for Loop Tack- These test methods cover the determination of properties of a pressure-sensitive adhesive. These test methods are applicable to those adhesives that form a bond of measurable strength rapidly upon contact with another surface.
PSTC 5 Quick Stick	Test Methods for Pressure Sensitive Adhesive Tapes- Quick Stick of Pressure Sensitive Tapes
PSTC 16 Loop Tack	Test Methods for Pressure Sensitive Adhesive Tapes - Loop Tack
FINAT FTM 9 Loop Tack	'Loop' tack measurement provide the means of assessing the most important and yet the hardest to measure property of pressure sensitive materials, the tack. The method allows the end user to compare the "initial grab" or "application tack" of different laminates and can be extremely useful to those working with automatic labeling equipment where this property is of particular importance. The 'loop' tack value of a pressure sensitive material is the force required to separate, at a specified speed, a loop of material (adhesive outermost) which has been brought into contact with a specified area of a standard surface.
TLMI-IB1 Loop Tack	Standard Test Methods for Loop Tack- dynamically via peel
AFERA 4015 Quick Stick	Quick stick -1945, uses a 25g roller to apply the test specimen to the panel

# Lab Master® Software

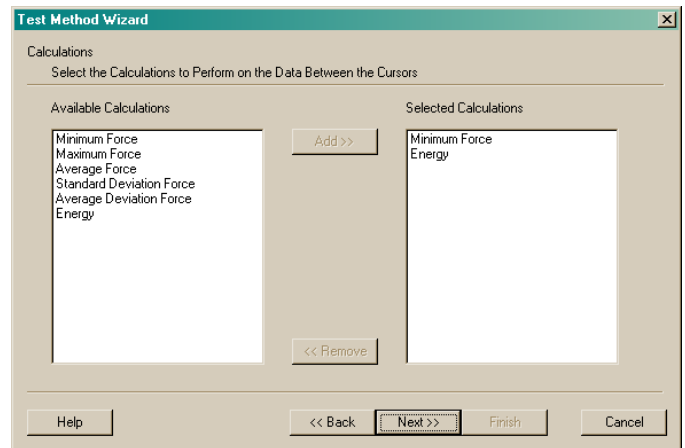
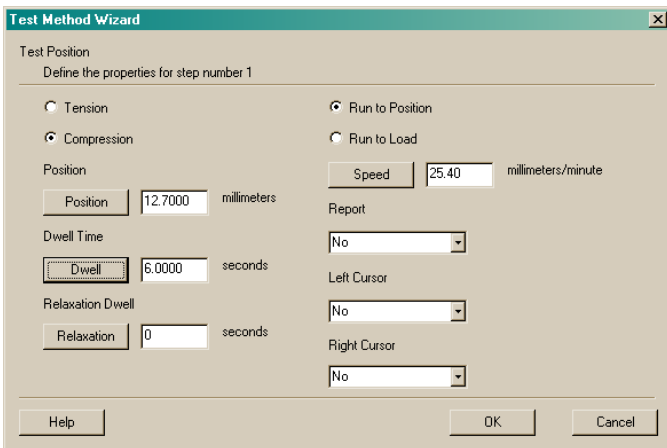


Includes a Loop Tack test method that automates the test process.

Test variables such as Compression and Tension test speeds, Compression Force, Dwell Time, Test Time, Results Calculations and Graphing are automatically performed by pressing the test key.

### Lab Master allows editing of the following:

- Minimum and Maximum force
- Average force
- Standard and Average Deviation Force
- Compression speed
- Energy
- Dwell time
- Tensile speed



▲ Test Method Wizard allows easy test set up for special test applications

## Lab Master® Advantages

- Windows® Environment – Extremely simple to operate, it works on Windows XP.
- Data Storage – Sample and Test Information is stored for future recall
- Presentation – Easy operation of test instrument using Touch Screen, Result and test curve/graph information is displayed on display

# LAB MASTER<sup>®</sup> LOOP TACK TESTER

## SPECIFICATIONS

### Force (tension and compression)

Maximum	±2.3 kg	±5.0 lb	Other force ranges available
Resolution	0.1 g	0.0002 lb.	
Accuracy	±0.5% of reading ±0.5 g	±0.5% of reading ±0.5 g	Exceeds the requirements of ISO 7500-1 Class 0.5 Tension or Compression
Overload rating	150%	150%	

### Travel and Position

Travel (maximum)	160 mm	6.25 inches	Varies depending on attachment
Position Resolution	0.1µm	0.00004 inches	
Position Repeatability	0.2 µm	0.00008 inches	
Position Accuracy	±1.0 µm	±0.00004 inches	
Position Accuracy (cumulative)	±1.0 µm/60mm (cum.)	±0.000017 inches/2.4 inches (cum.)	

### Speed

Range	0.01 to 13 mm/second	0.01 to 0.5 inches/second
Accuracy (steady state)	Better than 0.05%	Better than 0.05%
Data Acquisition rate	2 kHz	2 kHz

### Throat Depth

	82 mm	3.3 inches
Number of repeat cycles	As required	As required
Display- TFT flat panel touch screen	300 mm	12 inch

### Environmental Range

Temperature (operating)	5°C to 35°C	40° to 95°F
Temperature (storage)	-20°C to 55°C	-4° to 130°F
Humidity (operating and storage)	10% to 85% Non-condensing	10% to 85% Non-condensing

### Physical Dimensions

W X D X H	490 X 535 X 880 mm	19.25 X 21 X 34.75 in
Working Surface Height	290 mm	11.5 inches
Weight	50 kg	110 lbs.

### Electrical Characteristics

Supply Voltage	100-240 VAC
Current (max.)	10 Amperes
Frequency	50-60 Hz

#### Main Headquarters

**Testing Machines Inc.**  
40 McCullough Drive  
New Castle, DE 19720  
Tel: (302) 613-5600  
Fax: (302) 613-5619  
Info@testingmachines.com

**Büchel BV**  
t/a Messmer Büchel  
Fokkerstrat 24, 3905 KV  
Veenendaal, Netherlands  
Tel: +31 (0)318 521500  
Fax: +31 (0)318 540358

**Lako Tool and  
Manufacturing Inc.**  
7400 Ponderosa Road  
Perrysburg, Ohio 43552  
Tel: (419) 662-5256  
Fax: (419) 662-8225

**Lawson Hemphill**  
1658 G A R Highway  
Swansea, MA 02777 USA  
Tel: (508) 679-5364  
Fax: (508) 679-5396  
Information@  
lawsonhemphill.com

**Adamel Lhomargy SARL**  
Z.A. de l'Habitat, Bâtiment  
6 Route d'Ozoir, 77680  
Roissy en Brie, France  
Tel: +33 (0) 1 64402910  
Fax: +33 (0) 1 64409211

**TMI Canada**  
40 McCullough Drive  
New Castle, DE 19720  
Tel: (302) 613-5600  
Fax: (302) 613-5619  
canada@testingmachines.com

