ProGage Thickness Tester

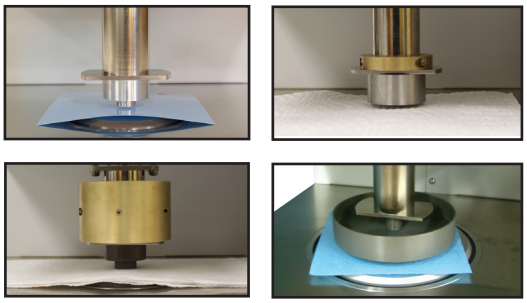
Precision Micrometer

The ProGage Thickness Tester is a precision micrometer that utilizes advanced technology to quickly and accurately measure the thickness of sheeted materials such as paper, plastic film, tissue and toweling, nonwovens, and textiles.

This thickness tester features a dual speed pressure foot which enables it to perform up to 20 test cycles per minute (based on configuration) while maintaining a high degree of accuracy. The anvil design ensures excellent parallelism as well as zero stability and calibration.

A wide range of selectable presets for the measuring of speed distance and the pressure foot speed, as well as pressure feet diameters and weights, enables the unit to be configured to meet a specific test standard. The ProGage is also capable of continuous or single testing with statistical analysis that is automatically performed. Average, high, low and standard deviation are computed, displayed and can be printed.

The ProGage is designed to be used in conjunction with other laboratory instruments for measuring the physical properties of materials.



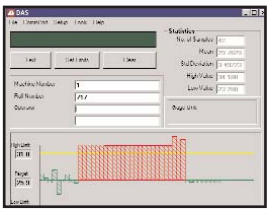
▲ Examples of Pressure Feet Options

Standard Pressure Feet

- Paper Foot: 0.630” (16mm) Dia, 50.33 kPa
- Paper Foot 0.630” (16mm) Dia, 100 kPa
- Film Foot: 0.250” (6.35mm) Dia, 51.71 kPa
- Tissue Foot: 1.406” (35.7mm) Dia, 2.0 kPa
- Nonwoven Foot: 2.221” (56.4mm) Dia, 0.5 kPa
- Custom pressure feet upon request

Data Acquisition Software

Data Acquisition Software (DAS) is a Windows® based optional software package that provides the ability to collect data and perform additional statistical analysis. DAS enables you to plot results real time against defined limits, generate semi-custom reports and export test data to other spreadsheet packages for further management.



FEATURES

- Auto push-button zero control
- Dual speed setting for test cycle increases samples measured per minute
- Rigid mechanical design ensures zero and parallel stability
- Stores up to 99 samples
- Results: Average, high, low, standard deviation
- Single or continuous cycling mode
- Push-button unit conversion: mils, microns, millimeters, inches
- Adjustable travel height of pressure foot
- PC Compatible via RS-232 port

Sample Feeder

An automatic strip feeder is available for cross-reel profiling and roll or strip feeding. It can accommodate samples up to 7 inches (177.8 mm) wide. The distance the sample is fed between tests can be set from 0.1 to 19.9 inches (2.5 to 505 mm). The feeder rate is 3.33 inches/sec (84.6 mm/sec).

Foot Switch

A foot actuated control enables the user to start a test with one press of the foot switch thereby keeping the hands free to insert test samples.

Performance Data - Measuring Ranges

Default Settings	**40 mil (1 mm)**	**100 mil (2.5 mm)**	**200 mil (5 mm)**	**500 mil (12.7 mm)**
Opening - mils:	80	150	220	520
Dwell Time:	0 - 9.9 sec	0 - 9.9 sec	0 - 9.9 sec	0 - 9.9 sec
***Accuracy:**	±0.00004 in (±0.001 mm)	±0.00005 in (±0.0012 mm)	±0.00025 in (±0.0064 mm)	±0.0005 in (±0.013 mm)
***Parallelism:**	±0.00004 in (±0.001 mm)	±0.00005 in (±0.0012 mm)	±0.00025 in (±0.0064 mm)	±0.0005 in (±0.013 mm)
Display Resolution:	0.00001 in 0.01 mil 0.001 mm 0.1 micron	0.00001 in 0.01 mil 0.001 mm 0.1 micron	0.00005 in 0.05 mil 0.005 mm 0.5 micron	0.0001 in 0.1 mil 0.01 mm 1 micron

* *Accuracy and parallelism specifications are subject to change based on pressure foot diameter and weight and may be adversely affected if a clean environment is not provided. Special requirements are quoted on request.*

Note: Machines that are configured for a particular specification, either customer or published, may differ from the above performance specification.

SPECIFICATIONS

Physical Specifications

Dimensions
10 in (W) x 12 in (D) x 12.5 in (H)
(254.0 mm x 304.8 mm x 317.5 mm)

Net Weight
52 lb (23.6 kg)

Throat Depth
4.75 in (120.6 mm)

Gross Weight
57 lb (25.9 kg)

Applicable Standards Include:

ASTM D374, D1777, D645, D6988, TAPPI T411, BS3983, BS4817, EN20534, ISO 534 Preferred Method, ISO 3034, ISO 4593, ISO 12625-3, DIN 53105, DIN 53353, EDANA 30.4-89

Performance Data

Measurement Speed Distance
Range from 0.0005 to 0.500 in (0.012 to 12.7 mm)

Dwell Time
0.0 - 9.9 seconds (selectable)

Pressure Foot Speed
15 Presets available between 0.026 - 0.416 in/sec
(0.660 mm/sec - 10.566 mm/sec)

Pressure Foot Diameter Size
0.19 in to 2.2 in (4.83 mm to 56 mm)
Special Sizes Available Upon Request
Special Applications Allow Interchangeable Feet

Pressure Foot Anvil Size
Standard: 2.5 in (63.5 mm)
Available up to 4.5 in (114.3 mm) - meets EDANA method

Power Consumption
Operating Max: 18 Watts, Standby Max: 12 Watts

Power Requirements
110/115 VAC ± 10% @ 60 Hz, 220 VAC ± 10% @ 50 Hz
or 240 VAC± 10% @ 50 Hz

Specifications subject to change without notice.