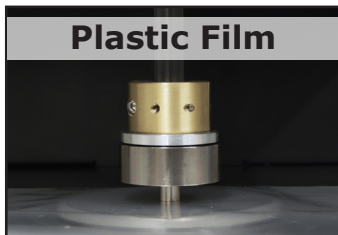# ProGage Touch Thickness Tester
Precision Micrometer

The ProGage Touch Thickness Tester is a precision deadweight micrometer. Its advanced technology enables quick and accurate measurement of sheeted materials such as **paper, plastic film, tissue and toweling, nonwovens, and textiles**.

Featuring a color touchscreen and an intuitive user interface, operators can perform tests and report critical data quickly. A variable speed motor provides increased testing throughput with up to 20 tests per minute (based on configuration) while maintaining a high degree of accuracy. The rigid design guarantees exceptional parallelism, stability, and precise calibration.
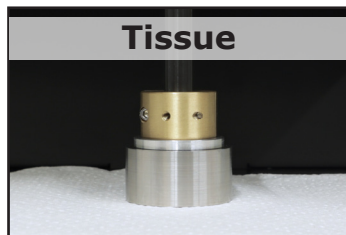
The mechanical configuration features a weighted lever design reducing the amount of pressure applied to a specimen. This is significant when measuring the thickness properties of materials that can be influenced by varying pressures such as high loft nonwovens and paper tissue products.

The ProGage offers customizable parameters including measurement speed, dwell time, opening distance and return speed to allow the operator to meet specific methods or create and save custom setups. This feature proves beneficial when testing necessitates the capability to swap pressure feet to comply with various materials or standards.
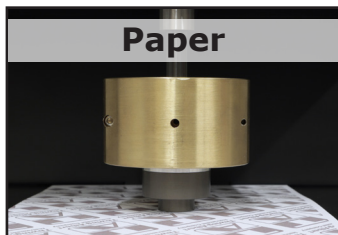
To ensure data integrity and security, the ProGage offers password protected user profiles to limit access to specific screen views and lock the ability to modify parameters. Statistical data is displayed instantly upon the press of a single button, allowing for swift and comprehensive analysis.
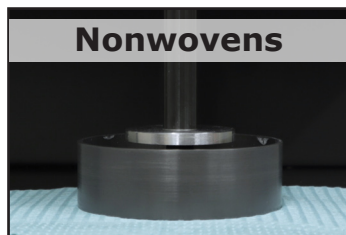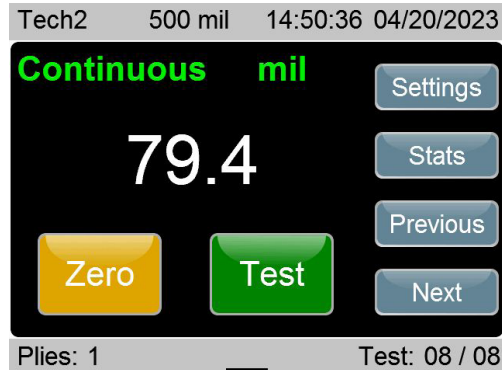
Plastic Film

Tissue

A wide variety of standard and custom pressure feet and weight combinations are available.

Paper

Nonwovens

FEATURES

- Touchscreen interface
- Interchangeable pressure feet and augmenting weights
- Variable speed motor - up to 20 tests/min
- Rigid frame for zero & parallelism stability
- Store up to 99 samples
- Results: Avg, Hi, Lo, Std Dev
- Single or continuous test mode
- Easy unit conversion: mil, μm, mm, in
- Adjustable opening distance between the pressure foot and anvil
- Send data direct to USB flash drive
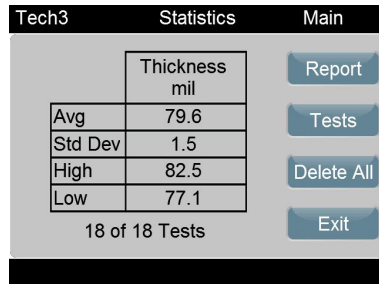- PC connectivity via USB port
- MAP4 Software compatible

Thwing-Albert
Instrument Company

TA071123

thwingalbert.com

BUILT-IN INTERFACE

Tech2	500 mil	14:50:36 04/20/2023

Continuous   mil

79.4

Settings

Stats

Previous

Next

Zero   Test

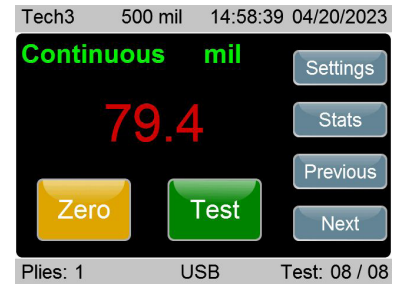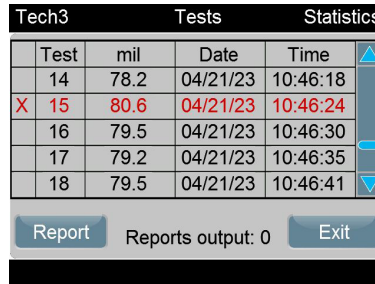Plies: 1   ___   Test: 08 / 08

The touchscreen interface is designed to put the results you need on demand as testing is completed. You can view your individual tests and all statistics with the press of a button.

With the touchscreen, you can now quickly change units of measure and the data will be converted automatically. Selecting your setup is quick and you can control values like opening distance, dwell time, speed and measuring distance.
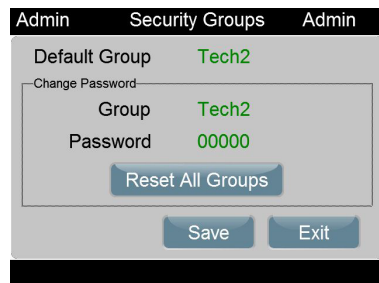
Data captured can be stored directly to a USB drive, printed or transmitted to a computer with optional software.
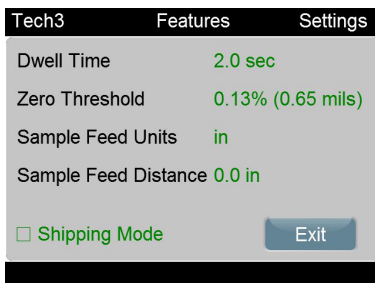
Tech3	Statistics	Main

	Thickness mil
Avg	79.6
Std Dev	1.5
High	82.5
Low	77.1

18 of 18 Tests

Report

Tests

Delete All

Exit

Tech3	Tests	Statistics

Test	mil	Date	Time
14	78.2	04/21/23	10:46:18
X 15	80.6	04/21/23	10:46:24
16	79.5	04/21/23	10:46:30
17	79.2	04/21/23	10:46:35
18	79.5	04/21/23	10:46:41

Report   Reports output: 0   Exit

Tech3	500 mil	14:58:39 04/20/2023

Continuous   mil

79.4

Settings

Stats

Previous

Next

Zero   Test

Plies: 1   USB   Test: 08 / 08

Review statistics quickly from the main screen. At a glance you will see statistics including **average, standard deviation, high and low** based on the test data. It is simple to scroll through individual tests individually or view a list and choose any tests to be eliminated from your results for analysis.
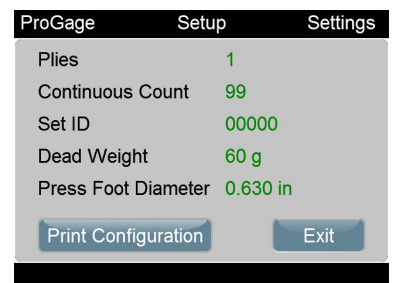
Excluded results are displayed in red when scrolling on the main screen.

Admin	Security Groups	Admin

Default Group   Tech2

Change Password

Group   Tech2

Password   00000

Reset All Groups

Save   Exit

Tech3	Features	Settings

Dwell Time   2.0 sec

Zero Threshold   0.13% (0.65 mils)

Sample Feed Units   in

Sample Feed Distance 0.0 in

☐ Shipping Mode   Exit

ProGage	Setup	Settings

Plies   1

Continuous Count   99

Set ID   00000

Dead Weight   60 g

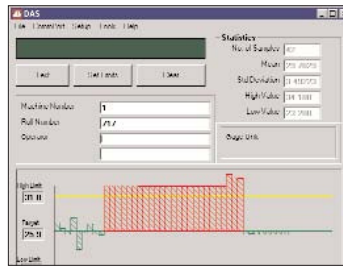Press Foot Diameter 0.630 in

Print Configuration   Exit

Password protected user profiles are available to simplify testing for technicians. Additionally advanced users can define testing methods and review full functions. Four selectable user profiles are preset.

Settings can be reviewed and modified to meet your testing standards. The ProGage Touch will be configured based on the standards you require. You can choose to modify or create your own settings and save this as a stored test setup. Select your dwell time, plies, continuous or single testing.

SOFTWARE OPTIONS

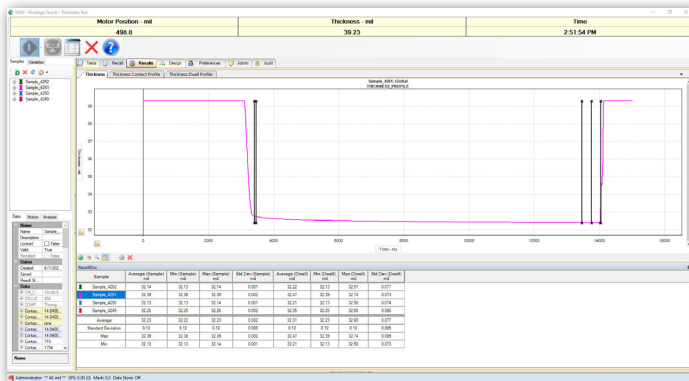## DAS Software - Simplified Analysis

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 in real time against defined limits, generate semi-custom reports and export test data to other spreadsheet packages for further management.
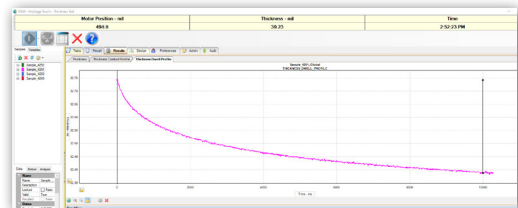
MAP4 Software - Advanced Analysis

The option to add MAP4 software enhances data analysis and reporting capabilities of the ProGage Touch. In addition to reporting the thickness of the material, MAP4 provides insight as to how the sample thickness changes during the dwell time.
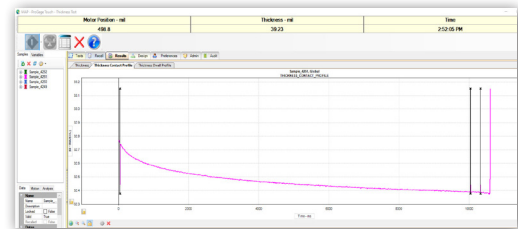
- Intuitive user interface to simplify testing
- Easily create/modify/save test setups
- Automatic graphical analysis of each test
- Search and recall historical data
- User defined tracking variables

- Calculated Statistics: avg, max, min, std dev, variance
- Preset password protected user profiles
- Automatic data export to Excel

↑ Enhanced Analysis During the Dwell Time

↑ MAP4 Graph and Results for Thickness

↑ Analysis During the Entire Contact Time

⬇ MAP4 Results and Statistical Data

	Sample	Average (Sample) mil	Min (Sample) mil	Max (Sample) mil	Std Dev (Sample) mil	Average (Dwell) mil	Min (Dwell) mil	Max (Dwell) mil	Std Dev (Dwell) mil
	Sample_4252	32.14	32.13	32.14	0.001	32.22	32.13	32.51	0.077
	Sample_4251	32.39	32.38	32.39	0.002	32.47	32.39	32.74	0.073
	Sample_4250	32.13	32.13	32.14	0.001	32.21	32.13	32.50	0.074
	Sample_4249	32.25	32.25	32.26	0.002	32.35	32.25	32.65	0.085
	Average	32.23	32.22	32.23	0.002	32.31	32.23	32.60	0.077
	Standard Deviation	0.12	0.12	0.12	0.000	0.12	0.12	0.12	0.005
	Max	32.39	32.38	32.39	0.002	32.47	32.39	32.74	0.085
	Min	32.13	32.13	32.14	0.001	32.21	32.13	32.50	0.073

ResultDoc

Sample Feeder - Optional

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 to 20.0 inches (0 to 50.8 cm). The feeder rate is 3.33 inches/sec (84.6 mm/sec).

Foot Switch - Optional

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.

Printer - Optional

A compact 40 Column Printer is available to provide a quick and convenient means to print test reports.

Performance Data - Measuring Ranges

Default Settings	40 mil (1 mm)	100 mil (2.5 mm)	200 mil (5 mm)	500 mil (12.7 mm)
*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

Dimensions
10.1 in (W) x 12.5 in (D) x 15.9 in (H)
(255.0 mm x 318.5 mm x 403.9mm)

Net Weight: 54.5 lb (24.7 kg) / **Gross Weight:** 62.5 lb (28.3 kg)

Throat Depth: 4.75 in (120.6 mm)

Opening Distance
65 to 750 mils (1.65 to 19.05 mm)

Measurement Speed Distance
Range from 0.005 to 0.500 in (0.013 to 12.7 mm)

Dwell Time
0 - 20 seconds (selectable)

Pressure Foot Speed
40 & 100 mil range:
0.013 to 0.500 in/sec (0.33 to 12.7 mm/sec)
200 & 500 mil range:
0.025 to 0.500 in/sec (0.64 to 12.7 mm/sec)

Pressure Foot Diameter Size
0.19 in to 2.221 in (4.83 mm to 56.41 mm)
Special Sizes Available Upon Request
Special Applications Allow Interchangeable Feet

Pressure Foot Anvil Size
Standard: 2.5 in (63.5 mm)
Optional: 4.25 in (107.9 mm) - meets EDANA method

Applicable Standards Include:

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

Power Consumption
120-230VAC, 36VA

Power Requirements
Input Voltage: 120-230 VAC ±10%
Frequency: 50-60 Hz

Sample Rate
128 samples per second, during a test

Specifications subject to change without notice.