



NONWOVENS

Testing Solutions

Nonwovens Testing

SDL Atlas offers a wide variety of instruments to serve the Nonwovens Industry. With such wide applications of end use, nonwovens require an equally wide variety of testing for determining if key physical characteristics are within acceptable ranges and meet necessary standards. We offer the most comprehensive line of textile testing equipment, trusted world wide for providing confidence in testing physical properties such as:

- Tear Resistance
- Permeability to Air and Liquids
- Strength Testing
- Abrasion
- Liquid Penetration
- Comfort

The instruments featured here are just a small sampling of the solutions we offer for durability, safety and comfort testing for the Nonwoven Industry. Please visit our website: www.sdlatlas.com or contact us to discuss specific needs.

PowerTear™ Elmendorf Tearing Tester



The PowerTear High Energy Elmendorf Tearing Tester is the most versatile tearing tester of its kind. It is designed to provide fast, accurate results while also being easy to use.

With increased functionality and unmatched ease of use, the PowerTear features an innovative pendulum design that is controlled by a sophisticated microprocessor. The full color touch screen allows the user to easily set up tests and choose results in 7 different units of measurement.

Electronic braking and two button release provide safety while the rotary encoder, pendulum balance control, and release pin bearing increase accuracy and reliability. Lever clamps make sample loading fast and easy for the operator.

The use of the optional “E” Pendulum increases the capacity of the PowerTear to 128 N for heavy duty materials.



Lever Clamps hold the sample securely for making the initial cut and for testing.

STANDARDS:

AFNOR G07-149	ASTM D1424	ASTM D1922
BS 4253	BS 4468	DIN 53862
DIN 53128	GB/T 3917.1	ISO 4674-2
ISO 6383-2	ISO 1974	ISO 13937-1
M&S P29	NEXT 17	NWSP 100.1
TAPPI T414		



AirPerm Air Permeability Tester

The AirPerm's advanced pressure system measures the flow of air through a performance textile.

The AirPerm makes air permeability testing affordable while maintaining confidence that test results meet international and retailer standards. Designed to meet air permeability standards for textiles, nonwovens, and paper the AirPerm provides quick, straightforward results in the unit of measure of your choice.

Versatile

- Automatic ranging system detects the size of the installed test head and determines the pressure range required
- The powerful, yet quiet vacuum accommodates a variety of test plates to suit every application and features easy calibration for daily checks.
- The long arm and large table allow for larger samples to be evaluated in multiple areas.
- 20 cm testhead standard for calibration
- Performs "Face Mask Testing" to EN 14683
- Full color touch screen controller
- Test results can be stored to the main controller for retrieval or a USB drive for remote printing
- Side drawers for test head and accessory storage
- Performs "Foam Testing" to ASTM D3574 & EN ISO 7231 (optional foam test fixture is required)



STANDARD

TEST HEAD SELECTION

	5 cm ²	20 cm ²	25 cm ²	38 cm ²	50 cm ²	100 cm ²	Foam Box	Mask Test
adidas TM 6.08				•				
ASTM D737	•			•		•		
ASTM D3574							•	
BS 5636	•							
DIN 53887		•			•	•		
EDANA 140.1		•			•			
EDANA 140.2		•			•			
EN ISO 7231							•	
EN 14683								•
GB/T 5453	•	•			•	•		
ISO 9237	•	•			•	•		
JISL 1096-A				•				
TAPPI T251				•				
NWSP 70.1	•	•	•	•	•	•		
Dense Samples						•		

*20 cm² Test Head comes standard. Others are optional. Black dots denote preferred test head, red denotes acceptable alternatives.

HydroPro Hydrostatic Head Tester



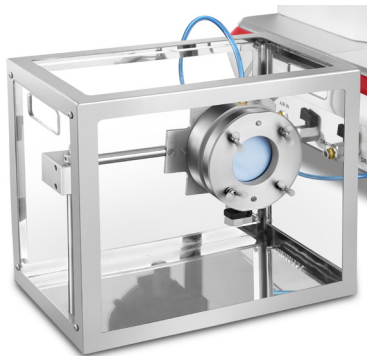
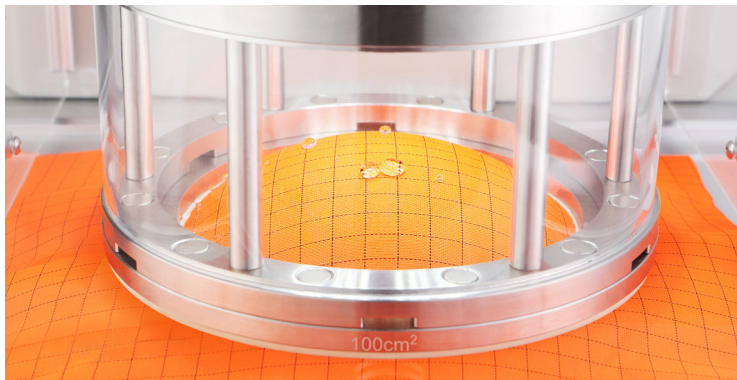
Designed to measure a material's resistance to water, the HydroPro offers the best value hydrostatic head tester available

The HydroPro determines the waterproof properties of fabrics such as canvas, coated fabrics, hood fabric, tarpaulin, rain-proof fabrics and geotextiles.

Video Caputure

Video recording and image capture show operators real time pressure that can be reviewed after testing via computer software allowing the exact moment and details of failure to be determined.

- Fast Test function allows users to rapidly approximate a failure point and perform other tasks during the standard test time. An alarm indicates fail pressure is close.
- Testing pressure up to 5 bar
- Pneumatic sample clamping to avoid slippage and leakage
- Automatic water filling and water level detection
- Full color touch screen controller preloaded with popular standards and ability to create custom programs
- Connects via WiFi to our exclusive RemoteAccess App which alerts the operator when the test is 80% complete
- LED lighting of sample area and clear safety shield
- 100 cm² test head included



Optional fixture of Pore Size Test for BS 3321

Optional fixture of Blood Penetration Test for ASTM F1670, BS ISO 13994 and ISO 16603



Video recording and image capture

STANDARDS:

AATCC 127	AATCC 208	ASTMD751 procB	BS 3424-26 29A	BS EN 20811	BS ISO 13994
Decathlon-DS-0006	Decathlon-DS-270	EN 343	EN 1734	FZT 01004-2008	GB/T 4744
ISO 811	ISO 1420 A & B	ISO 9073-16	JIS 1092A&B	NWSP 80.4	NWSP 80.6

*Standards for included 100 cm² test head. Other standards can be met with optional accessories

Universal Testing Machines

Electromechanical testing machines from Tinius Olsen are designed to test a wide range of materials for a variety of strength tests including tension, compression, flexure and peel.

Testing machines are available in frame capacities of 1kN, 5kN, 10kN, 25kN and 50kN and are combined with a variety of grips and fixtures, extensometers and software to provide standard testing systems for a variety of applications.

Flexibility and simplicity of use is also built into the design of these machines.

Adaptable

The Tinius Olsen series instruments are endlessly adaptable to the specific needs of the customer through a variety of options.

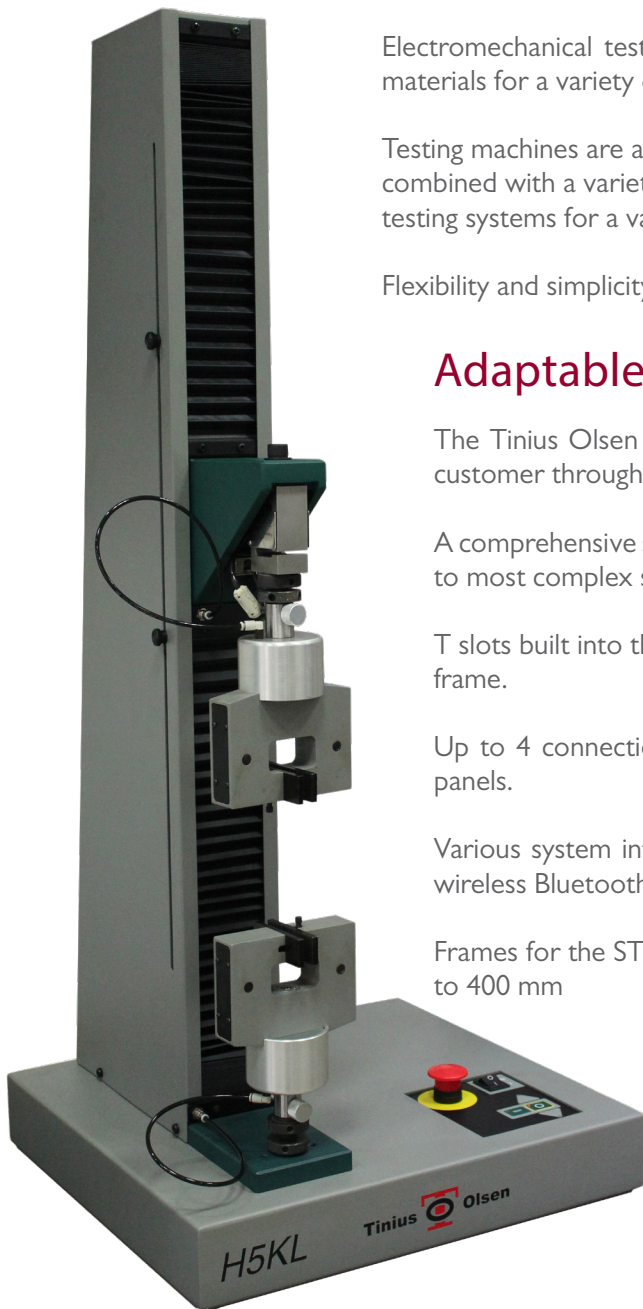
A comprehensive selection of self identifying loadcells, grips and fixtures to hold the simplest to most complex samples

T slots built into the machine column allow accessories to be securely mounted to the test frame.

Up to 4 connections can be made with the test frame via built-in accessory connection panels.

Various system interface options available, from a familiar tethered handheld interface, a wireless Bluetooth interface panel, or virtual machine controller

Frames for the ST series can be modified by adding extra height to the test area to bring it to 400 mm



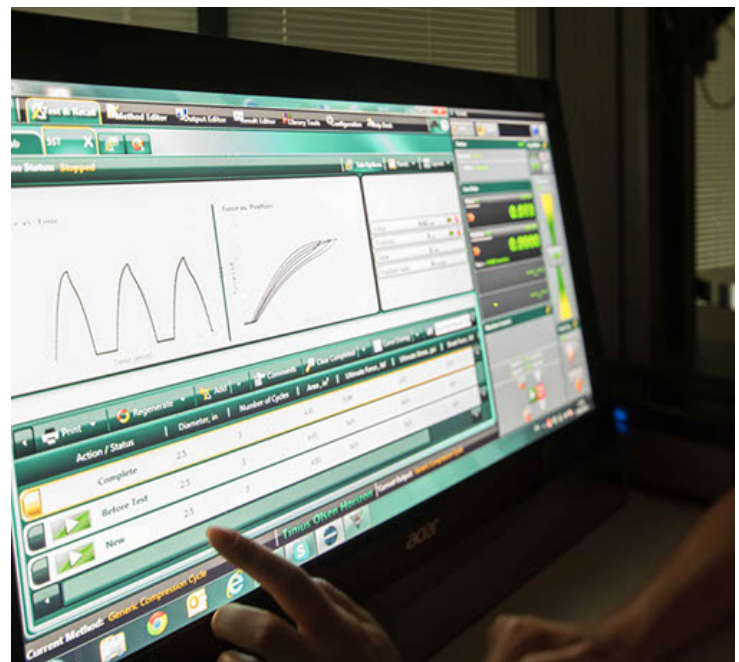
The L Package: Strength Simplified

The L Package offers a comprehensive bundle containing the most common tester (5kN capable) and accessories for performing most material strength testing needs.

L Package includes:

- Model H5kL, 5kN Universal Testing Machine
- 5kN replaceable load cell
- 100N replaceable load cell
- HT45 pneumatic operated grip with 25x25mm rubber coated jaw faces & 25 x 75 mm rubber coated jaw faces
- HT406 safety grip controller
- Footswitch
- Horizon testing software
- Textile library with 500+ pre-programmed standards

Horizon Software



All Tinius Olsen testing machines are powered by **Horizon Software**. This searchable database contains a variety of pre-defined testing routines and methods that are based on standards from ASTM, ISO, EN, BS, DIN, and many more.

Martindale Abrasion and Pilling Tester

Purposefully designed to be the most intuitive option on the market, the SDL Atlas Martindale line can perform a wide variety of abrasion and pilling tests.

The Martindale is a versatile instrument capable of multiple abrasion and pilling tests for all types of materials. The sleek, functional instrument design enhances the ease of use and reliability of results.

The user-friendly sample holder design allows operators to easily change over testing station configurations with specialized enhancement kits. Multiple speeds can be input to create custom tests as necessary.

The 6, 8 and 9-position instruments are designed to conserve valuable bench space while providing maximum testing capacity. For smaller testing requirements, the Martindale is also available in a 4-position base model.



Enhanced sample holders allow for quick sample loading and quick-lock couplers facilitate easy access for service and calibration

Features

- A full color touch screen controller, with the most common functions accessible in one or two touches, makes this the easiest Martindale in the market to use
- Interface is Multi-lingual with display options in English, Chinese, Spanish and Turkish
- Individual station counters make intermediate sample checks simple to perform and indicate predicted end of test time
- Lightweight motion plate coupled with a strong and solid base increases instrument stability
- Side Mounted Sample Holder Storage Rack available as an option for the 6, 8 and 9 head models
- Notification flash of the relevant station's lighting along with an audible alarm indicate the end of a test
- Accessory Holder available separately to conveniently hold Martindale accessories while not in use
- Consumables ordering information accessible directly on the instrument display

STANDARDS:

ADIDASTM 4.30	ASTM D4966	ASTMD4970	BS EN 388	BS EN ISO 12945-2	BS EN ISO 12947-1
GB/T 4802.2	GB/T 13775	GB/T 21196-1	GB/T 21196-2	JIS L 1096 Method E	M&SP19 & 19C
M&S P140	NEXT 18 A & 18B	NEXT26	NWSP 020.5.R0		

For a complete list of Martindale Standards, visit www.sdlatlas.com

Comfort Testing

MMT[®] Moisture Management Tester

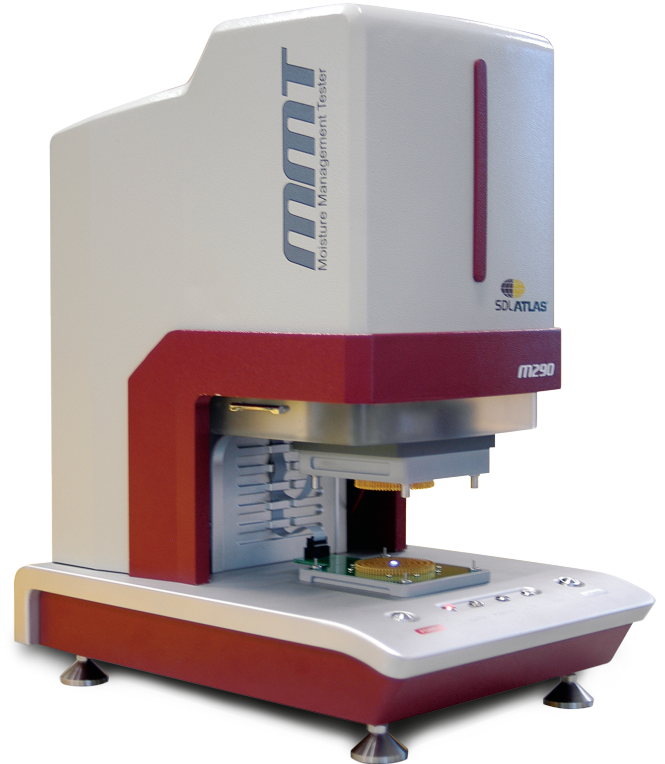
The MMT[®] performs innovative measurement of dynamic moisture transport of performance textiles.

One 2-minute test gives a comprehensive profile of a fabric's performance with the following data:

- Overall Moisture Management Capability
- Accumulative One-Way Transport Capability
- Wetting Time for top and bottom surfaces
- Absorption Rate for top and bottom surfaces
- Max Wetted Radius for top and bottom surfaces
- Spreading Speed for top and bottom surfaces

Moisture Management measurements go far beyond the very basic wicking test and let textile producers design a product that meets the full needs of the end user.

The MMT is the only instrument on the market that can precisely measure the liquid management properties of performance and technical textiles, ensuring the comfort and protection that consumers demand.



STANDARDS:

AATCC 195

GB/T 21655.2



STANDARD:

FZ/T 01166-2022

FTT[®] Fabric Touch Tester

The FTT[®] measures skin touch comfort objectively and quantitatively in one simple test.

In just a single, simple five minute test the FTT measures:

- Thickness
- Compression
- Bending
- Roughness
- Friction
- Thermal Properties

Much as a spectrophotometer is used for color, the FTT can measure, communicate, and compare fabric hand through a global supply chain providing consistency among Research & Development, Designers, Manufacturers, Test Labs and more.

Impact Penetration Tester

For Testing Water Resistance: Impact Penetration

The Impact Penetration Tester evaluates the resistance of textiles to the penetration of water by impact, such as rain penetration. The stainless steel frame allows for repeatable and accurate test results.

The drip catcher can be rotated into place once the test is completed and keeps residual water from potentially contaminating future tests.

SDL Atlas also supplies the specialized 6" x 9" Blotting Paper that the test requires.

Used to perform critical safety testing for Personal Protective Equipment (PPE)

STANDARDS:

AATCC 42

ISO 18695

IST 80.2 (01)

NWSP 080.3

AAMI PB70



Spray Rating Tester

The best tool to quickly determine the surface wetting resistance of fabrics.

The Spray Rating Tester determines the surface wetting resistance of fabrics. It is comprised of a stainless steel framework allowing distilled water to be sprayed through a nozzle onto a test specimen at 45° located 150 mm below the nozzle. The appearance of the specimen is then compared against a photographic scale.

Innovation made easy

Precision spray nozzle

Quick lock design for easy sample loading

Durable metal frame made of high-grade 316 stainless steel

STANDARDS:

ISO 4920

M&SP23

AATCC 22

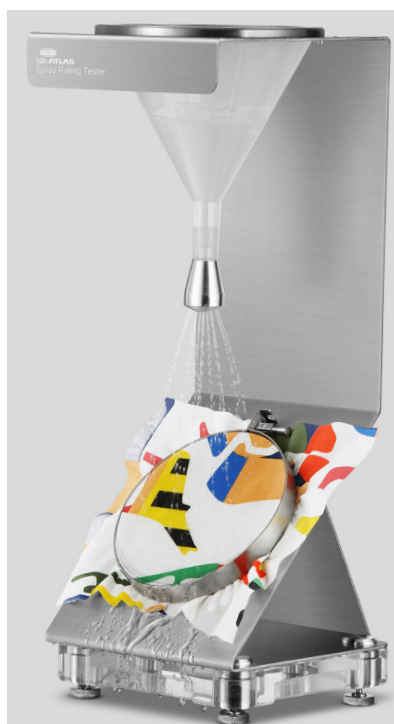
Next 23

BS EN 24920

BS 3702

GB/T 4745

NWSP 80.1



Providing confidence in standard based testing through expertise and global partnering



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