



BURSTING STRENGTH TESTERS

Bursting Strength Testers

SDL Atlas offers two options for evaluating bursting strength: the Autoburst and the PnuBurst. Both employ the use of a rubber diaphragm that expands to stretch the sample until there is a rupture. Both measure the bursting pressure and distension height of multiple samples and then calculate an average bursting strength after subtracting the pressure to expand the bare diaphragm. The Autoburst is a heavy duty hydraulic system while the PnuBurst is pneumatic and offers additional testing capabilities. Both instruments can operate as a stand-alone unit or via a computer.

Both the Autoburst and PnuBurst offer:

- **Automatic Flow Control** – to ensure the burst happens in the required window of time as prescribed by the selected standard.
- **Automatic Diaphragm Correction** – to subtract the pressure it takes to inflate the bare diaphragm from test results to achieve real bursting strength measurements.
- **Automatic Bell and Ring Detection** – the controller will recognize the bell and clamping ring sizes and ensure they match.
- **Result Analysis** – Included software provides full analysis of multi-sample test results including each sample and mean and standard deviation.



Quality Consumables Ensure Quality Test Results

SDL Atlas supplies a wide variety of consumables to ensure confidence in standards testing. We offer two burst-ing verification fabrics developed for the purpose for verifying that a bursting tester is maintaining normal conditions between ISO 17025 calibrations. The nominal bursting strength values of these verification fabrics are the results obtained from being tested by multiple units of calibrated (UKAS) Bursting Testers, both pneumatic and hydraulic types from different manufacturers.

The lifetime of a diaphragm depends on the strength and elasticity of the samples, as well as the test area specified in the test standard. Three types of diaphragm are available to maximize the performance of the PnuBurst and one for the Autoburst.



Bursting Verification Fabric



PnuBurst Diaphragms

Autoburst Diaphragm

Autoburst Hydraulic Bursting Strength Tester

The Autoburst gives unmatched performance in bursting strength and intelligence. The hydraulic system provides 6000 kPa (871 psi) of pressure to handle heavy duty fabrics and fabrics that need to comply with test standards that specify hydraulic testing, offering distension measurement up to 70 mm.

The Autoburst also has a customized testing mode where pressure, distension, and flow rate can be specified. Test results display on the instrument screen.

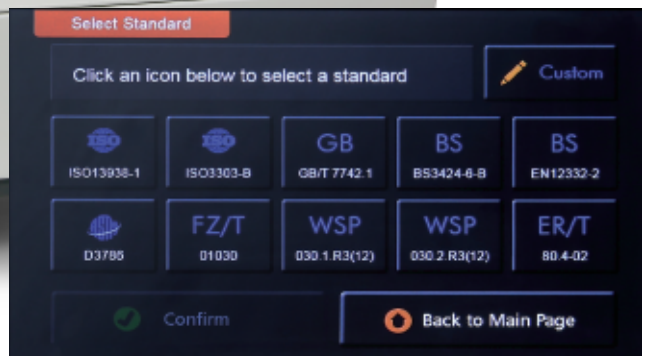
Equipped with a full-color touch screen controller, the new design allows easy access for diaphragm changes and maintenance.



6000 kPa (871 psi)



Full-Color Touch Screen



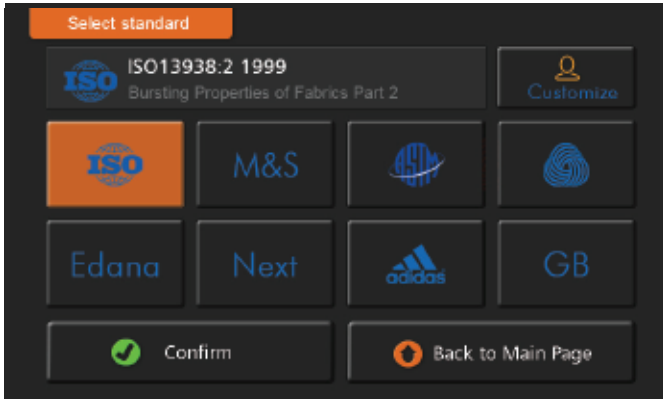
Preprogrammed test routines

STANDARD	TEST HEAD SELECTION				
	30.5 mm (7.3 cm ²)	31 mm (7.55 cm ²)	31.5 mm (7.8 cm ²)	35.7 mm (10 cm ²)	79.8 mm (50 cm ²)
• Preferred ✗ Optional					
ASTM D3786		•			
BS 3424-6		•		•	
EN 12332-2				•	
EDANA ERT 80.4-20	✗			✗	•
FZ/T 01030	•				
ISO 13938-1	✗			✗	•
ISO 3303-2	•	•	•	•	
GB/T 7742.1					•
WSP 030.1.R3 (12)		•			
WSP 030.2.R3 (12)	✗			✗	•
Distension Height	39 mm	39 mm	39 mm	39 mm	70 mm

This list of standards is a partial listing of the most common textile standards. The instrument can also be used for packaging, paper, plastic and foil.

PnuBurst Pneumatic Bursting Strength Tester

The PnuBurst provides unparalleled capabilities in a pneumatic bursting tester. The full-color touch screen controller is very easy to use and provides full test controls including clamping pressure and Marks & Spencer controls. A laser measurement system is used for distension height. The PnuBurst has great power for a pneumatic tester with 1500 kPa (200 psi).



Preprogrammed test routines



Easy touch screen for running and viewing results



1500 kPa (200 psi)

STANDARD

TEST HEAD SELECTION

STANDARD	30 mm (7.1 cm ²)	30.5 mm (7.3 cm ²)	31 mm (7.55 cm ²)	35.7 mm (10 cm ²)	79.8 mm (50 cm ²)	80 mm (50.3 cm ²)	113 mm (100 cm ²)
● Preferred ✗ Optional							
adidas 4.09					●		
ASTM D3786			●				
EDANA ERT 80.4-20		✗		✗	●		
GB/T 7742.2		●			●		●
ISO 13938-2		✗		✗	●		✗
M&S P27	●					●	
Next 22	●						
Woolmark TM29			●				
WSP 030.1.R3 (12)			●				
WSP 030.2.R3 (12)		✗		✗	●		
Distension Height	25 mm	31 mm	31 mm	31 mm	70 mm	45 mm	70 mm

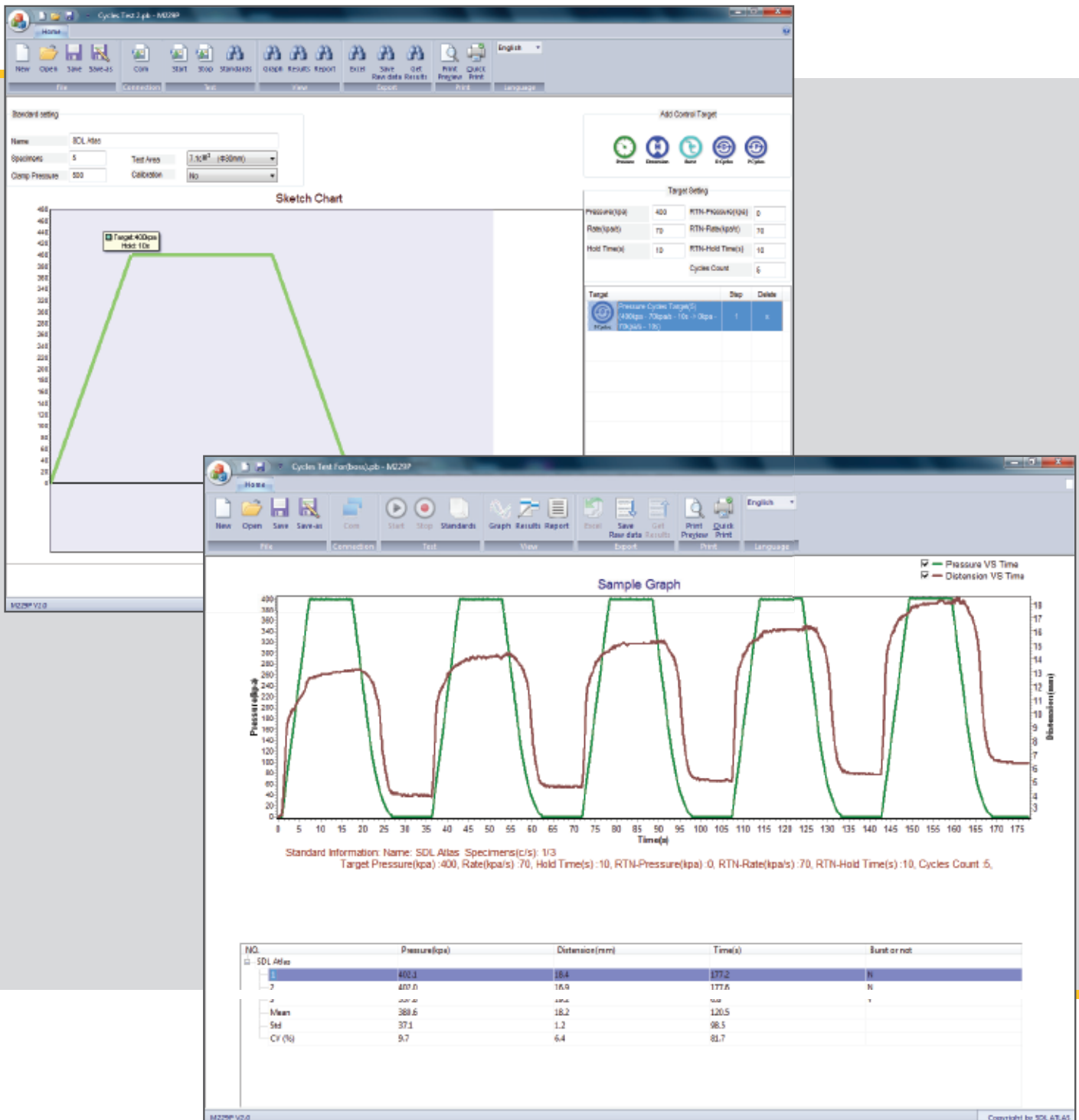
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Elastic Fabrics

Elastic Fabrics – There is now a better way to test elastic fabrics. Traditional methods pull them in a single direction such as a dead weight or a cyclic test on a tensile tester. The PnuBurst allows users to see how elastic fabrics respond to being stretched in 3 dimensions – just like our bodies do to clothing.

The **ElastiTest software** for the PnuBurst gives users the ability to subject a sample to multiple stretches. Specific test routines can be programmed to determine the number of cycles, hold period at maximum stretch, and stretch and release rates. The user also selects if they want to maintain either the maximum distension height or the maximum pressure for each cycle.

The charts and data are shown on a PC that is connected to the PnuBurst. Data will show how well a fabric maintains its elasticity, strength, and recovery ability while being subjected to 3 dimensional forces.



Providing Confidence

For over 60 years, the SDL Atlas companies have been providing confidence in standard based testing through expertise and global partnering. Our customers can be assured that they are making informed decisions based on accurate test results.

SDL Atlas experts work closely with standards committees and retailers on development of standards. Our engineers develop instruments to meet these standards. Our service team calibrates the instruments to exacting UKAS and internal standards. High quality consumables that are consistent from batch to batch are also produced and distributed by SDL Atlas.

Consumables

Consumables are a critical part of many textile tests. SDL Atlas produces and distributes a complete line of consumables. Each batch is thoroughly tested to ensure conformity and consistency from batch to batch.

Our consumables offerings include:

- Multifiber
- Cork Liners
- Abradants
- Phenolic Yellowing
- Detergents
- Ballasts
- Crocking Fabric

Calibration & Service

- UKAS calibration
- ISO calibration
- Service support
- Factory trained representatives
- SDL Atlas service technicians



SDL Atlas is a UKAS accredited calibration laboratory No. 0688. With fully trained technicians located in Europe, Asia, and North America, we are prepared to support our customers in maintaining their investments and their confidence in their testing instruments.

Providing confidence in standard based testing through expertise and global partnering



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