GenBurst Pro – Hydraulic Bursting Strength Tester

Standards: ISO 13938.1, ASTM D3786, ASTM D751, BS 4768, SATRA TM 170, WSP 30.1, Woolmark TM 29, JIS L 1018.6.17, FZ/T 60019, FZ/T 01030

- ULTIMATE USER-FRIENDLINESS
- LEADING DEPENDABILITY AND RELIABILITY
- STRICT COMPLIANCE WITH INDUSTRY STANDARDS
- STOCKED CONSUMABLES AND SPARES
- TRUSTED AFTER SALES TECHNICAL SUPPORT
- LIFETIME PRODUCT SUPPORT ADVANTAGE

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Description

GenBurst Pro is a hydraulic bursting strength tester developed for precise measurement of bursting strength and distension at burst in woven fabrics, knitted fabrics, nonwovens, paper, and board materials. Using hydraulic pressure applied through a rubber diaphragm, it helps laboratories evaluate how materials perform under multidirectional stress in quality control, product development, and standards-based testing. With automated burst detection, servo-controlled loading, multiple test modes, interchangeable test areas, and touchscreen operation, GenBurst Pro is built for reliable day-to-day use in professional lab environments.

Main Features

GenBurst Pro is designed for labs that need dependable bursting strength data, flexible test setup, and a professional workflow that supports routine testing across different material categories.

- **Hydraulic Diaphragm Testing:** Measures bursting strength and burst distension by applying hydraulic load through a rubber diaphragm, making it suitable for materials tested under multidirectional stress.
- **Automated Burst Detection:** Detects the burst point automatically to improve test sensitivity and reduce operator dependence during measurement.
- **Four Test Modes:** Supports Constant Rate Bursting, Constant Expansion, Constant Pressure, and Constant Time Bursting for greater testing flexibility.
- **Servo-Controlled Loading:** Uses an AC servo drive system to support stable pressure application, low-noise operation, and consistent lab performance.
- **Interchangeable Test Areas:** Accommodates multiple test area options, allowing the system to adapt to different sample types and testing methods.
- **Touchscreen Control:** Provides a straightforward operator interface for test setup, execution, and routine use in QC and R&D workflows.
- **Protective Transparent Cover with LED Illumination:** Improves specimen visibility during testing while supporting safer operation around the test zone.
- **Integrated Output and Connectivity:** Supports saved results, printed output, and computer connection for documentation and review.

Applications

GenBurst Pro is intended for laboratories and manufacturers that need accurate bursting performance data for flexible materials, sheet products, and engineered substrates. It is especially useful when multidirectional loading provides a more meaningful performance profile than a simple tensile test.

- **Woven Fabrics:** Bursting strength evaluation for structured textile materials.
- **Knitted Fabrics:** Performance testing for knit constructions where burst behavior is a key quality indicator.
- **Nonwoven Materials:** Bursting evaluation for technical nonwovens, disposable products, and industrial sheet materials.
- **Paper and Board:** Useful for paper-based and board materials where burst resistance is part of product validation or process control.
- **Quality Control Programs:** Supports incoming inspection, lot comparison, production monitoring, and product qualification testing.

Who This System Is For

GenBurst Pro is a strong fit for organizations that need repeatable bursting strength data as part of a structured testing program. It is well suited for:

- **Textile manufacturers**
- **Knitted and woven fabric producers**
- **Nonwoven material manufacturers**
- **Paper and board testing laboratories**
- **Quality control and quality assurance teams**
- **R&D and materials engineering groups**
- **Independent test laboratories**

Technical Specifications

For labs planning installation, qualification, or day-to-day operation, the specifications below summarize the main performance parameters, test configuration options, and physical requirements of the system.

Parameter	Value
Model Options	GenBurst Pro 1 / GenBurst Pro 2
Pressure Range	290 psi (2.00 MPa) / 1,450 psi (10.000 MPa)
Minimum Division Value	0.001 MPa / 0.003 MPa
Test Area Options	7.3 cm2 (Dia. 30.5 mm), 10 cm2 (Dia. 35.7 mm), 50 cm2 (Dia. 79.8 mm), optional 100 cm2 (Dia. 112.8 mm)
Rubber Diaphragm Thickness	≤ 2 mm
Pressure Speed	100 to 500 mL/min
Accuracy	±1 mm when burst height is up to 70 mm
Test Units	kPa, kgf/cm2, lb/in2, bar
Test Methods	Constant Rate Bursting; Constant Expansion; Constant Pressure; Constant Time Bursting
Output	Printer, display output, computer-connectable
Power Supply	AC 220 V, 50/60 Hz, 500 W

Parameter	Value
Dimensions	21.7 x 17.7 x 27.6 in. (550 x 450 x 700 mm)
Weight	275.6 lb (125 kg)

Standards

GenBurst Pro supports recognized bursting strength methods used across textile and related material testing programs. The primary supported standards include:

- **ISO 13938.1**
- **FZ/T 60019**
- **FZ/T 01030**
- **ASTM D3786**
- **ASTM D751**
- **BS 4768**
- **Woolmark TM 29**
- **WSP 30.1**
- **JIS L 1018.6.17**
- **SATRA TM170**

Standard Accessories

GenBurst Pro is supplied with the core components needed for setup, calibration, and routine bursting strength testing in the lab.

- **7.3 cm2 Test Set (Dia. 30.5 mm):** 1 set
- **50 cm2 Test Set (Dia. 79.8 mm):** 1 set
- **Wrench:** 1 pc
- **Stainless Steel Calibration Plate:** 1 pc
- **Rubber Diaphragm:** 1 pc
- **English Operation Software:** 1 pc
- **PC Connection Cable:** 1 pc

Optional Accessories

Additional accessories are available for labs that need alternative test areas, spare consumables, or supporting utilities for their installation.

- **Other Test Sets**
- **Rubber Diaphragm**
- **Air Compressor**

Ready to Review Your Bursting Strength Testing Requirements?

If you are specifying a bursting strength tester for fabrics, nonwovens, paper, or board materials, NextGen Material Testing can help you match the system to your standards, material types, and lab workflow. Send us your testing requirements, target pressure range, and sample details, and our team will help you evaluate the right configuration and prepare a quote for your application.