

# **Bursting Strength Testers**









### **Bursting Strength Testers**

Bursting Strength is a widely used measure of resistance to rupture of various materials.

A test specimen is held between two circular clamps and subjected to an increasing pressure from a rubber diaphragm. The rubber diaphragm is expanded by a controlled hydraulic pressure until the test specimen ruptures. The Bursting Strength of the specimen is the pressure reading at the time of rupture.

#### Significance: (Why this test?)

The Bursting Strength Test of paper, paperboard, including liner board and corrugated board, is a composite measure of certain properties of the sheet structure, principally tensile strength and elongation. In general, bursting strength is dependent on the type, proportion, preparation and amount of the fibre present in the sheet and their formation, internal sizing, and to some degree, the surface treatment. While bursting strength is an empirical property, this test, in combination with basis weight, serves to define "standard grades" in commerce.

**Recommended for :** Paper, Paperboard, Corrugated board, Nonwovens, Textiles, Geotextiles, Film, Tissue, Tobacco Leaf.

**Consumables:** Rubber diaphragms, Anhydrous hydraulic fluid, Calibration foil.

Accessories: C spanner, 3 spare diaphragms, 250ml. topping up fluid.

#### **Standard Compliance:**

All Linux Bursting Strength Tester Models meet: TAPPI: T-493, T-807, T-810, ASTM: D774, D2529, D738 AS/NZ: 1301, 403, 438, ISO: 2758, 2759, DIN: 53141 SCAN: P24, P25, FEFCO: Method No.4 (1966) IS: 1060 ( Part 1)-1966,1397-1967,13228-1991 FCBM: 3:90

All Models operate on Single phase, 230 V AC, 50 Hz power supply.

All Models can be supplied with non standard capacity of 0-14, 0-21, 0-52 & 0-70 kg/cm2 on request Linux offers a range of Bursting Strength Testers, each innovatively designed to meet specific requirements of testing

# **Analog Models**

#### **Common Features of Analog Models:**

- Single push button cycle. Two units of measurement (Kg/cm2 & PSI)
- · Lazy Hand (maximum pointer) for maximum burst reading
- · Heavy duty industrial SS Bourdon pressure gauges for greater durability.

#### **Burst Factor (B. F.)**

Burst factor is a parameter that relates Bursting Strength (B.S.) and Substance of paper (GSM). B. F. = B. S. X 1000 ÷ GSM

#### **Standard Model**

Model: BST7/35STD (Board Tester)



Dimensions: (Depth X Width X Height) (370 X 855 X 450 mm)

#### Features:

- Simple construction, open type, body mounted pressure gauges and panel mounted operating switches
- Switch from one gauge to another by opening and closing of SS Needle valves.

#### Two Models:

4/7 STD (Paper) with capacity 0-4 & 0-7 kg/cm2 7/35 STD (Board) with capacity 0-7 & 0-35 kg/cm2

#### Weight:

- · Net Weight: 67 kgs
- Gross Weight: 100 kgs

Model: BST07STD (Paper Tester)



Dimensions: (Depth X Width X Height) (370 X 655 X 450 mm)



#### Super Model

Model: BST7/35SU (Board Tester)

#### Features:

- Fully enclosed body, panel mounted gauges and operating switches
- Switch from one gauge to another by a simple switch
- Dual gauges for greater accuracy

Dimensions: (Depth X Width X Height) (425 X 655 X 525 mm) Weight: • Net Weight: 100 kgs • Gross Weight: 130 kgs

#### **Double head Model**

Model: BST7/35DH (Paper & Board Tester)

#### Features:

- Fully enclosed body, panel mounted gauges and operating switches.
- Dual head for paper & board testing.
- Switch from one gauge to another by opening and closing of SS Needle valves.
- Capacity 0-7 kg/cm2 for Paper with least count 0.1 kg/cm2
- Capacity 0-35 kg/cm2 for Board with least count 0.5 kg/cm2
- · Other capacity available on request

Dimensions: (Depth X Width X Height) (470 X 670 X 575 mm) Weight: • Net Weight: 112 kgs • Gross Weight: 150 kgs





# **Single Head Digital Models**

#### **Common Features of Single Head Digital Models:**

- Single head machine testing for Paper OR Corrugated Board
- Paper Tester: Fitted with thin Rubber Diaphragm to accurately test materials having lower burst values like Paper. Capacity: 14 kg/cm2 with least Count 0.01 kg/cm2.
- **Board Tester:** Fitted with Moulded Rubber Diaphragm to test material with higher burst values like Paperboard, Corrugated Board, Fabric Cloth, etc.
- Capacity: 35 kg/cm2 with least Count 0.1 kg/cm2.

   Measuring Units: kg/cm2 or PSI. Auto Calibration in 5 simple steps. •Overload protection.

#### **Economy Digital Model**

Model: BSTEDBOA or BSTEDPAP

#### Features

- · Single push button operation
- Manual clamping
- · Direct Display of Readings Digitally
- Peak hold facility

#### Dimensions:

(Depth X Width X Height) (450 X 655 X 525 mm)

#### Weight:

- Net Weight: 100 kgs
   Cross Weight: 120 kgs
- Gross Weight: 130 kgs





#### **Clamp N Print Model**

Model: BSTCNPBOA or BSTCNPPAP

#### Features:

- Fully enclosed body, panel mounted micro processor based digital display
- Adjustable clamping pressure.
- · System BF calculation for Paper.
- · A group of 12 test can be performed for report.
- · Accept or reject validation. · Manual clamping
- Average of test results on report.
- Programmable Product Codes, Vender / Customer Codes, GSM, Date & Time.
- Report is directly printed from the built-in Thermal printer.



(Depth X Width X Height) (450 X 655 X 615 mm)

#### Weight:

- Net Weight: 100 kgs
- Gross Weight: 130 kgs





Printed Test Report

#### **Micro Digital Model**

Model: BSTMDBOA or BSTMDPAP

#### Features:

- Single push button operation activates an automatic test cycle
- Adjustable clamping pressure (Pneumatic air to be provided by user)
- · Test result remains frozen till next operation

#### **Dimensions:**

(Depth X Width X Height) (450 X 725 X 550 mm)

### Weight:

- Net Weight: 100 kgs
- Gross Weight: 135 kgs





Model: BSTMPBOA or BSTMPPAP

#### **Features**

- Single push button operation activates an automatic test cycle
- Adjustable clamping pressure

### (Pneumatic air to be provided by you)

- System BF calculation for Paper
- Programmable User Name, Product Name,
  Vender / Customer Name, Codes, Lot No., Date & Time etc.
- · A group of 12 tests can be performed for report
- Report can be directly printed from the dot matrix printer connected to the machine (the printer to be provided by user)



#### Dimensions:

(Depth X Width X Height) (450 X 725 X 550 mm)

#### Weight:

- Net Weight: 100 kgs
- Gross Weight: 135 kgs





#### Micro PC Model

Model: BSTMPCBOA or BSTMPCPAP

- The Micro PC Model is an extension of micro print model with PC connect ability and operations.
- · RS 232 Port with Software, to transfer data to computer (Computer to with provided by user)
- The reports can be exported to PDF, MS Excel format.
- · Windows based Software.
- · You can recall any test done in history.
- · Adjustable clamping pressure

(Pneumatic air to be provided by you)

#### **Dimensions:**

(Depth X Width X Height) (450 X 725 X 550 mm)

Weight:
• Net Weight: 100 kgs

· Gross Weight: 135 kgs



#### MicroTouch Screen PC Model

Model: BSTMTPCBOA or BSTMTPCPAP

#### **Features**

- The machine is microprocessor capable of highly accurate precise load measurements and rapid data acquisition.
- · Modern design concept of mechatronics, hydraulic system, multi-functional, beautiful appearance, convenient maintenance.
- Data management is easy. Users can create their own specific identification numbers and view data at any time. Stored data can be re-displayed or printed.
- Rugged Computer Hardware with Touchscreen Monitor.
- Programmable User Name, Product Name, Vender/Customer Name, Codes, Lot Number etc.
- LCD touch flat panel monitor for easy viewing.
- A group of 12 test can be performed for report.
- Accept or reject validation.
- · Average of test results on report.
- · Adjustable clamping pressure

(Pneumatic air to be provided by you)

(Depth X Width X Height) (540 X 775 X 600 mm)

#### Weight:

- · Net Weight: 120 kgs
- · Gross Weight: 160 kgs

# **Double Head Digital Models**

#### **Common Features of Double Head Digital Models:**

- · Double head machine testing for Paper and Corrugated Board
- Paper head: Fitted with thin Rubber Diaphragm to accurately test materials having lower burst values like Paper. Capacity: 14 kg/cm2 with least Count 0.01 kg/cm2.
- · Board head: Fitted with Moulded Rubber Diaphragm to test material with higher burst values like Paperboard, Corrugated Board, Fabric Cloth, etc.
- Capacity: 35 kg/cm2 with least Count 0.1 kg/cm2.
- Measuring Units: kg/cm2 or PSI. Auto Calibration in 5 simple steps. •Overload protection.
- Switch from one head to another by opening and closing of SS Needle valves.

#### **Economy Digital Model**

Model: BSTDHED

#### Features:

- · Dual head for paper & board testing.
- Single push button operation
- Manual clamping
- · Direct Display of Readings Digitally
- · Peak hold facility

#### **Dimensions:**

(Depth X Width X Height) (495 X 670 X 575 mm)

#### Weight:

- Net Weight: 112 kgs
- Gross Weight: 150 kgs



#### Clamp N Print Model Model: BSTDHCNP

- Fully enclosed body, panel mounted micro processor based digital display.
- Adjustable clamping pressure.
- System BF calculation for Paper.
- A group of 12 test can be performed for report.
- Accept or reject validation.
- · Manual clamping
- LCD display
- · Average of test results on report.
- Programmable Product Codes, Vender / Customer Codes, GSM, Date & Time.
- · Report is directly printed from the built-in Thermal printer





Printed Test Report

#### **Dimensions:**

(Depth X Width X Height) (535 X 770 X 675 mm)

#### Weight:

- · Net Weight: 126 kgs
- Gross Weight: 170 kgs





#### **Micro Digital Model**

Model: BSTDHMD

#### Features:

- · Single push button operation activates an automatic test cycle
- Adjustable clamping pressure (Pneumatic air to be provided by user)
- Test result remains frozen till next operation

#### **Dimensions:**

(Depth X Width X Height) (535 X 850 X 660 mm)

#### Weight:

- Net Weight: 126 kgs
- · Gross Weight: 170 kgs





#### **Micro Print Model** Model: BSTDHMP

### Features:

- · Single push button operation activates an automatic test cycle
- Adjustable clamping pressure

### (Pneumatic air to be provided by you)

- System BF calculation for Paper Programmable User Name, Product Name,
- Vender / Customer Name, Codes, Lot No., Date & Time etc.
- · A group of 12 tests can be performed for report
- Report can be directly printed from the dot matrix printer connected to the machine (the printer to be provided by user)



#### **Dimensions:**

(Depth X Width X Height) (535 X 850 X 660 mm)

#### Weight:

- Net Weight: 126 kgs
- · Gross Weight: 170 kgs

#### Micro PC Model

Model: BSTDHMPC

#### Features:

- The Micro PC Model is an extension of micro print model with PC connect ability and operations.
- RS 232 Port with Software, to transfer data to computer (Computer to with provided by user)
- The reports can be exported to PDF, MS Excel format.
- · Windows based Software.
- · You can recall any test done in history.
- · Adjustable clamping pressure

(Pneumatic air to be provided by you)

#### **Dimensions:**

(Depth X Width X Height) (535 X 850 X 660 mm)

#### Weight:

- · Net Weight: 126 kgs
- · Gross Weight: 170 kgs



## Micro Touch Screen PC Model

#### **Features**

- The machine is microprocessor capable of highly accurate precise load measurements and rapid data acquisition.
- · Modern design concept of mechatronics, hydraulic system, multi-functional, beautiful appearance, convenient maintenance.
- · Data management is easy. Users can create their own specific identification numbers and view data at any time. Stored data can be re-displayed or printed.
- · Rugged Computer Hardware with Touchscreen Monitor.
- Programmable User Name, Product Name, Vender/Customer Name, Codes, Lot Number etc.
- · LCD touch flat panel monitor for easy viewing.
- A group of 12 test can be performed for report.
- · Accept or reject validation.

Model: BSTDHMTPC

- · Average of test results on report.
- Adjustable clamping pressure

(Pneumatic air to be provided by you)



The software program for Bursting Strength Tester is auto installable. Once the Test Configuration menu has been programmed, Start button is pressed, initiating the test. The results of the test are displayed on the PC in real time.



Sample test configuration screen



Sample test screen



**Dimensions:** 

Weight:

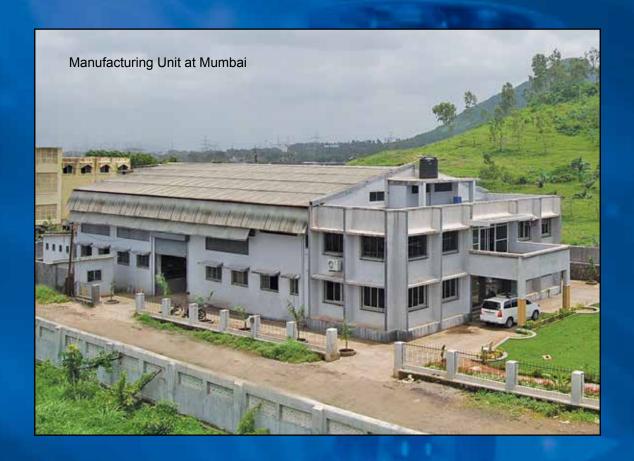
(Depth X Width X Height)

(540 X 1080 X 600 mm)

• Net Weight: 177 kgs

· Gross Weight: 237 kgs

Printed sample test report





# **Linux Machines Incorporation**

Plot No. 3, Ahad Industrial Complex, Near Bharat Gears Ltd., Bholenath Nagar, P. O. Dawla, Mumbra, Thane - 400612 Board Tel. No.: +91 88794 97458/68, 8879147554/56 Email: machines.linux@gmail.com www.linuxmachines.in