



BURSTING STRENGTH TESTER



Product Code: UBS 35DGA-TS / UBS 70DGA-TS



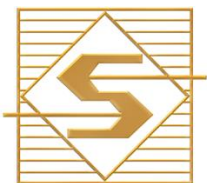
Marketed by:
**SAURASHTRA
SYSTOPACK PVT. LTD.**



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Manufactured by: **UBIQUE**, Pune



Ubique Bursting Strength Testers – Value for Money

All our models are in strict compliance of the above parameters as per the standard. Even our Two-in-One Models (UBS7-



35DG, UBS35DGAE, UBS35DGA, UBS35DGA-P & UBS35DGA-TS) maintain all these parameters separately for testing paper and board respectively. This possible due to a Dual Test Head design as shown below. The changeover is managed through a switch and valves.

We have paid detailed attention to the minutest in every area to serve the needs of the application in order to assure best possible Repeatability and Reproducibility.

The Bursting Strength Test appears to be a simple test is capable of a total force of 300 Kgs in a small test area. Hence the construction of the machine has to be robust to withstand this force which is evenly distributed over a small test area. The clamping force mechanism are designed to resist this force without any distortion or slippage in the test specimen.

Mechanical Design: The machine conforms to all the parameters mentioned above. The components like tripods, base plates, clamping brackets and other parts of the hydraulic assembly are made from high quality casting. This ensures high durability and long life without structural wear and tear which would happen in case of usual fabrication.

Electrical, Pneumatic & Safety Components: Only standard components which confirm adequate safety in terms of Voltage surges and other electrical hazards are used to ensure that the system as a whole provided appropriate performance. The geared motor are tested to deliver full torque at start so as to deliver the constant flowrate through the test.

Electronics, sensors etc...: The typical requirement of the bursting strength tester is that the pressure tends to rise at a very high speed as the total test only lasts a few seconds. The drop-in pressure is even quicker as the material is destroyed at peak pressure lasts only a few micro second. The Analogue to Digital Conversion interfaces, Microprocessors, Embedded control systems, Sensors like transducers are carefully evaluated for their performance are used in the machines only if they are found confirming to accredited third party laboratories. These specially developed electronics are designed to register the finest of values using an extremely high sample rates ranging in giga hertz. The chances are that slower sampling rate systems my reading, converting and reporting the peak pressure.

Bursting Strength Test – Critical Specifications as per Standards

Standard	Material	Flow	Diaphragm	Tripod	Base
ASTM, TAPPI, IS	Paper, Kraft Paper	95 ml/min	0.85 mm thickness made of pure gum rubber. Rated to offer consistent resistance against known distention as per standards.	Circular Opening 30.5 X 3.25 mm thickness with V-Grooves of 0.8 mm pitch and 0.25 mm depth. 3.2 mm from bore.	Circular opening 33.0 ± 0.08 mm x 3.25 mm thick with V grooves of 0.8mm pitch 0.3 mm depth 3.2 mm from bore 0.64 mm opening thick, lower edge with 6.4 mm radius.
ASTM, TAPPI, IS, FEFCO	Liner Board, Corrugated Board, Paper Board, Fibre Board	170 ml/min	Moulded Disc Shaped Diaphragm. Rated to offer consistent resistance against known distention	31.5 ± 0.03 mm x 9.5 mm thick, 0.64 mm. ≥ 96 mm OD X ID 31.5 x 9.5 mm thick, 3 mm radius. 60° v Groove 0.25 mm deep X 0.9 mm apart – innermost groove 3.2 mm from bore	31.5 ± 0.03 mm x 9.5 mm thick, 0.4 mm Top radius, 3.1 mm Bottom radius. ≥ 96 mm OD X ID 31.5 x 9.5 MM. 3 mm radius 60° v Groove 0.25 mm deep X 0.9 mm apart – innermost groove 3.2 mm from bore

Bursting Strength Tester

Bursting Strength is a reliable index of the strength and performance of materials like paper, paperboards, corrugated boards and boxes, solid fibreboards, filter cloth, industrial fabrics, leather, rexine, etc.

UBIQUE Bursting Strength Tester is ideal for testing a wide range of materials to determine their quality, strength and performance.

UBIQUE Bursting Strength Tester is easy to operate. It is scientifically calibrated for reliability. It is widely used by industries and institutions and stands out as a proven and reliable equipment.

A number of models are offered to suit different requirements of customers.

Bursting Strength Tester is available in three types

- 1. Paper Tester:** Fitted with thin Rubber Diaphragm to accurately test materials having lower burst values like Paper (Range: 01 to 07/10/14 kg/cm²).
- 2. Board Tester:** Fitted with Moulded Rubber Diaphragm to test material with higher burst values like Paperboard, Corrugated Board, Fabric Cloth, etc. (Range: 03-35/70 kg/cm²). Also offered with double pressure gauges (Range: 01 to 07 & 03 to 35/70 kg/cm²) but **readings in the lower range are only indicative and not accurate.**
- 3. Two-in-One Paper & Board Tester:** Fitted with Thin as well as Moulded Rubber Diaphragms for testing materials with lower as well as higher burst values accurately (Range: 01 to 07/10 & 35/70 kg/cm²).

Deluxe Models

I – Single Pressure Gauge Model



II – Dual Pressure Gauge Model



Features

- Fully enclosed and compact
- Panel-mounted pressure gauge/s – facilitates easier reading
- Gauge is fully protected
- Individual valve for each gauge in dual gauge model

Technical Specifications for I and II	
Dimensions in mm (L x W x H)	620 x 380 x 440
Weight in kgs	67
Power requirement	0.2 kW Single Phase
Electric Motor	220 Volts

Least Count:

Capacity	Least Count
01–07 kg/cm ²	0.1 kg/cm ²
01–10 kg/cm ²	0.2 kg/cm ²
03–35 kg/cm ²	0.5 kg/cm ²
03–70 kg/cm ²	2.0 kg/cm ²

DIGITAL MODELS



Paper Tester
Product Code:
UBS 14 AE

Board Tester
Product Code:
UBS 35 AE or
UBS 70 AE

I – Digital Economy Model

Features

- Peak hold facility
- Readings in kg/cm² also in PSI or Kpa
- Manual Clamping
- Least count of 0.1 kg/cm²
- **Available in two types**
 - a) Paper Tester Capacity: 14 kg/cm² (UBS 14 AE)
 - b) Board Tester Capacity: 35 kg/cm² (UBS 35 AE)

Technical Specifications for I	
Dimensions in mm (L x W x H)	620 x 380 x 440
Weight in kgs	67
Power requirement Electric Motor	0.2 kW Single Phase 220 Volts
Pressure Indicator Accuracy	1% of Full Capacity

Digital Bursting Strength Tester having pressure Transducer is always more accurate than Analogue one (with pressure gauge) because of its capability to pick up almost slightest variation in resistance offered by the specimen

II – Fully Automatic Digital Model



Paper Tester
Product Code:
UBS 14 A

Board Tester
Product Code:
UBS 35 A or
UBS 70 A

Features

- Single push-button operation
- Pneumatic Clamping Pressure for ensuring uniform application of pre-determined clamping pressure, to eliminate variations in the readings due to variations in clamping pressure – when done manually
(Compressed air to be provided by user.)
- High Precision Digital Read-out
- Readings are displayed digitally with least count of 0.1 kg/cm²
- **Available in two ranges:**
 - a) Board Tester with moulded rubber diaphragm
Range 40 kg/cm² (UBS 35A) or 70 kg/cm² (UBS 70A)
Readings in lower range are only indicative
 - b) Paper Tester with thinner rubber diaphragm
Range: 14 kg/cm² (UBS 14 A)

III – Fully Automatic Micro Processor-based Digital Model



Paper Tester **Board Tester**
Product Code: **Product Code:**
UBS 14 A-P UBS 35 A-P or UBS 70 A-P

Additional Features

- Incorporates Micro Processor-based Control Panel
- Printer Port Facility
- Results of the tests are stored for viewing or for taking printouts as required
(80 col. Dotmatrix printer to be provided by the user.)
- RS 232 Port facility, with necessary software, to transfer data to your computer
(Computer to be provided by user.)
- 16 X 2 Line 32 Character LCD Display
- Alpha-Numeric Key-Pad

Other Features are as per Fully Automatic Digital Model

Technical Specifications for II and III	
Dimensions in mm (L x W x H)	620 x 570 x 580
Weight in kgs	85
Power requirement Electric Motor	0.2 kW Single Phase 220 Volts
Compressed air (to be provided by user) for auto clamping of sample	Min. capacity : 5 kg/cm ² Min. Air flow : 5 C.F.M.
Pressure Indicator Accuracy	1% of Full Capacity

Specimen of PRINTOUT generated by
Micro Processor-based Digital Model

UBIQUE BURST-O-MATIC TEST REPORT					
USER_NAME	:	ABC LTD.			
SAMPLE CODE NO.	:	0001			
BURST TYPE	:	PAPER			
GSM	:	285			
ACCEPTANCE LIMIT	:	HIGH : 145 PSI LOW : 135 PSI			
Sl. NO.	BURST VALUE	BURST FACTOR	DATE	TIME	STATUS
08	141	34.7	27/12/97	09:20:55	AM Acc
10	140	34.3	27/12/97	09:34:54	AM Acc
14	88	21.4	27/12/97	09:38:29	AM Rpt
15	46	11.2	27/12/97	09:40:22	AM Rpt
26	136	33.3	27/12/97	10:00:02	AM Acc
27	135	33.3	27/12/97	10:00:30	AM Acc
28	136	33.3	27/12/97	10:01:00	AM Acc
30	137	33.6	27/12/97	10:01:58	AM Acc
TOTAL RECORDS	:	08			
VALID RECORDS	:	06			
MIN VALUE OF VALID RECORDS	:	135 PSI			
MAX VALUE OF VALID RECORDS	:	144 PSI			
AVERAGE BURST VALUE OF VALID RECORDS	:	138 PSI			
AVERAGE BURST FACTOR OF VALID RECORDS	:	33.2			

Selection available for
readings in either
kg/cm² or psi.

Two-in-One Models (Paper and Board Testers)

For Accurate Testing of Paper (Material of Low Burst Value)
as well as Paperboard and Corrugated Board (Material of High Burst Value)

I – Two-in-One Dual Pressure Gauge Model



Features

- Two Diaphragm Seats – One to accommodate thin rubber diaphragm for testing material of low burst value and other to accommodate moulded rubber diaphragm for testing material of higher burst value for accurate readings
- Selector switch to select either of the above testing
- **Two Dial Gauges**
 - (A) 01 to 07 or 10 kg/cm². Least Count: 0.1 kg/cm²
 - (B) 03 to 35 or 70 kg/cm². Least Count: 0.5 kg/cm²

II – Two-in-One Digital Economy Model



Features

- Two Diaphragm Seats – One to accommodate thin rubber diaphragm for testing material of low burst value and other to accommodate moulded rubber diaphragm for testing material of higher burst value for accurate readings
- Selector switch to select either of the above testing.
- Digital Indication of readings
- Peak Hold facility
- Readings in kg/cm². Also in PSI or Kpa
- Manual Clamping
- Capacity : 40 or 70 kg/cm²
- Least Count : 0.1 kg/cm²

Digital Equipment is always more accurate than the Analogue (with Pressure Gauge/s) because of its capability to pick up almost slightest variation in resistance offered by the specimen

Technical Specifications for I and II	
Dimensions in mm (L x W x H)	584 x 584 x 685
Weight in kgs	127
Power requirement Electric Motor	0.2 kW Single Phase 220 Volts
Pressure Indicator Accuracy	1% of Full Capacity

III – Two-in-One Fully Automatic Micro Processor-based Digital Model

Paper Tester and Board Tester



Product Code: UBS 35 DGA-P or UBS 70 DGA-P

Features

Same as Two-in-One Model (UBS 7-35DG or UBS 10-35DG)

Additional Features

- Single push button operation
- Pneumatic Clamping Pressure for ensuring uniform application of pre-determined clamping pressure, to eliminate variations in the readings due to variations in clamping pressure – when done manually
(Compressed air to be provided by user.)
- High precision digital read out with least count of 0.1 kg/cm²
- Incorporates micro processor-based control panel
- Printer port facility to generate printed report. (80 col. Dotmatrix printer to be provided by the user.)
- Test results are stored for viewing or for taking printout with special software to give details as shown in the specimen of the printout generated
- RS 232 Port facility, with necessary software, to transfer data to computer

Specimen of PRINTOUT generated by Micro Processor-based Digital Model

UBIQUE COMBINATION BURST-O-MATIC TEST REPORT

USER : ABC LTD.

SAMPLE TYPE : PAPER

HIGH LIMIT : 100 PSI LOW LIMIT : 050 PSI GSM : 242

PARTY : 110111111113 COMPONENT : 000311111101 LOT NO. : 111101101111

REF A : 10KB00M00100 REF B : 1221030IDA89 REF C : 000000011111

SR. NO.	DATE	TIME	BURST [PSI]	BURST FACTOR	REJECT	ACCEPT
01	02/04/99	02:29 PM	087	25.2		OK
02	02/04/99	02:30 PM	007	1.6	---	LO
03	02/04/99	02:31 PM	065	18.5		OK
04	02/04/99	02:32 PM	032	9.0	---	LO
05	02/04/99	02:32 PM	076	21.9		OK
06	02/04/99	02:33 PM	081	23.5		OK
07	02/04/99	02:34 PM	093	26.8		OK
08	02/04/99	02:34 PM	088	25.2		OK

TOTAL SAMPLES : 08

ACCEPTED : 06 (75.5%)

REJECTED : 02 (25.0%)

REJECT (HI) : 00 (0.0% OF REJECTED SAMPLES)

REJECT (LO) : 02 (100.0% OF REJECTED SAMPLES)

MIN BURST VALUE OF ACCEPTED SAMPLES : 065 PSI

MAX BURST VALUE OF ACCEPTED SAMPLES : 088 PSI

AVERAGE BURST VALUE OF ACCEPTED SAMPLES : 081 PSI

AVERAGE BURST FACTOR OF ACCEPTED SAMPLES : 23.5

Technical Specifications for III

Dimensions in mm (L x W x H)	830 x 630 x 710
Weight in kg	140
Power requirement Electric Motor	0.2 kW Single Phase 220 Volts
Compressed air (to be provided by user) for auto clamping of sample	Min. capacity : 5 kg/cm ²

All Models of Bursting Strength Tester are suitable for testing as per the following National and International Standards

IS	1060 (Part I) – 1996
	1397 – 1967 (Kraft Paper)
	13228 – 1991 (Corrugated Board)
	1966 – 1975 (Fabric)
	2771 (Part I) – 1977 (Corrugated Box)
FCBM	3:90 (Corrugated Fibreboard)
ASTM	D 774 / D774M-96a – Paper
FEFCO	TM 4 1997
TAPPI	T 403 om-91 (Paper)
	T 810 om-92 (Corrugated & Solid Fibreboard)
	T 807 (Paperboard and Linerboard)

Touch Screen Models

With Integrated Computerised Touch Screen Control Panel

The "Touch Screen Range of Equipments" will enhance your testing practices and experience to a great level. Every feature will impact your operation in a big way

Features

- **Easy to use Control Panel:**
Provide a MMI (Man - Machine Interface) on a touch panel
- **Graphic User Interface:**
Helps you navigate through procedures and functions
- **On-line Reporting:**
Comparative reports in reference to previously conducted test can be generated on the machine itself to help immediate comparison and spot analysis
- **Networking:**
Easy network compatibility to help you remotely access, view and draw data over local network of your workplace
- **Enhanced Storage:**
Data can be stored for long duration and selective maintenance of data can be done for ease of reference in the future

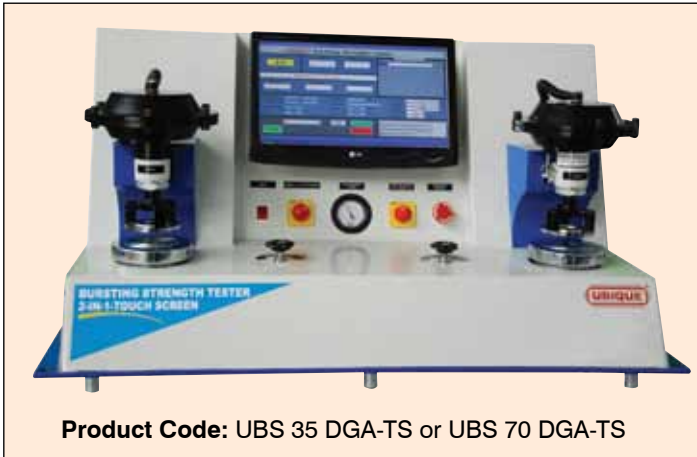
Advantages

- Flexibility to access different menu options with ease
- Self-guided User Interface ensures maximum user friendliness
All test parameters can be programmed referred, updated, edited and saved for future use
- The on-line reporting facility allows to carry out comparative analysis of the different tests that have been conducted
- Networking ability takes testing to the next level
- Touch Screen range of equipments are able to communicate with each other through a centralized Lab Management Software
- Enhanced storage facility allows building a vast data library of all tests carried out at various points

All digital models of Bursting Strength Testers are also available with Integrated Computerised Touch Screen Control Panel



Product Code: UBS -TS



Product Code: UBS 35 DGA-TS or UBS 70 DGA-TS



Other Testing Equipments available:

- Box Compression Strength Tester • Crush Tester • Puncture Resistance Tester • Substance Indicator • Cobb Tester
- Caliper Thickness Gauge • Vibration Tester • Universal Testing Machine • Tensile Strength Tester • Tear Resistance Tester
- Drop Tester • Specimen Maker (Fluter) for CMT • Sample Cutter • Moisture Tester

Since we are continuously improving and upgrading the equipment, the design and specifications of all models featured here are subject to change without notice.

Marketed by:
SAURASHTRA SYSTOPACK PVT. LTD.
 CIN-U33123MH1998PTC113502

Serviced by:
SAURASHTRA MARKETING CORPORATION

