



Packaging Testing Instruments for

- Paper Mill & Packaging Industries
- Corrugated Box Industries
- Food & Pharma Industries
- Chemical Industries



EIE INSTRUMENTS PVT. LTD.

(An ISO 9001:2015 Certified Company)

Bursting Strength Tester (PT-101SH/PT-101DH)



Compliance Standards

ASTM D3786, D774, D2738, T810, T403

Salient Features

- Sturdy in construction
- Noise-Less functioning
- Stepper motor with automatic fluid pump
- Logical detection of sample failure
- Capacity : 25kg/cm² or 50kg/cm²
- Display resolution : 0.1 kg/cm² (Only Digital Models)
- Unit selection : kg/cm², PSI
- Stores data upto last five readings
- Also, gives readings for BS (Bursting Strength) & BF (Bursting Factor)
- Reset function to initiate new batch testing

Type of Heads	HMI Touch Screen & PLC Controller based Fully Automatic Model		Microprocessor Based Digital Controller - Economy Model		Manual Bourdon Type Pressure Gauge Model
	PT-101SH25FA PT-101DH10/25FA	PT-101SH50FA PT-101DH10/50FA	PT-101SH25DE PT-101DH10/25DE	PT-101SH50DE PT-101DH10/50DE	
Single Head Dual Head					PT-101SH25M PT-101DH10/40M

Box Compression Tester (PT-103)

Compliance Standards

IS : 7028 (PART VI), IS : 7028 (PART IX), ASTM D4577, ASTM D642, TAPPI : T804

Salient Features

- PLC & HMI Touch screen display
- Auto-stop upon completion of Test
- Continuous rate of Loading
- Selectable compression units in N, kgf
- RS-232 data output
- PC Closed Loop Control

Technical Specifications

- Capacity : 1000 Kgf (10 KN)
- Least Count : 1 Kgf (0.01 KN)
- Suitable for a Testing Range : 10 - 1000 Kgf
- Auto-Calibration facility : At 100 Kgf (1 KN)
- Speed : 10 ± 3 mm/min (As per TAPPI)
- Power Supply : 230 Volts, 50 Hz, Single Phase, AC Supply



Platform Size	450 X 450 MM	600 X 600 MM	1000 X 1000 MM	2000 X 1000 MM
Model Nos.	PT-103DPA	PT-103DPB	PT-103DPC	PT-103DPD

Paper Core & Paper Tube Compression Tester (PT-104)

Compliance Standards

ISO 3035, ISO 3073, ISO 7263, IS 7028

Salient Features

- Standard Digital Model with backlit LCD display.
- Single instrument suitable for Radial Crush Test, Flat Crush Test on Paper Tubes/Paper Cores/Paper Cones.
- Electro-Pneumatic release mechanism.
- Direct Display of Load/Collapsing Force. No Calculations Required.
- Peak hold facility to register the maximum load .
- Auto-stop upon completion of Test.
- Supplied complete with flat test adapter (Radial crush adaptor at extra cost).
- Quick, handy, easy & less time consuming changeover of adaptors.
- Higher degree of consistency and reliability.

Applications

- For Paper Tubes/Cores used as Winding Medium/Carrier, Radial Crush Test is performed.
- For Paper Tubes/Cores used as Packing Material, Flat Crush & Vertical Crush Test is performed.
- For Paper Cones used as Yarn Carrier, Radial Crush Test is performed.
- For Paper Cones used as Packing Material, Flat Crush Test can also be performed.

Note

- Please specify tube OD x length/core OD dimensions while ordering.



Utilities Required (To be supplied by the buyer)

1. 50/100 Kg Cast Iron Weights - for calibration purpose.
2. Compressed Air supply at 5 - 6 kg/cm².

Cobb Sizing Tester (PT-105)

Compliance Standards

IS 1060, TAPPI T441, ISO 535

Applications

- To determine the water absorption property of paper, paper board and corrugated fibreboard in specified time under standardized conditions.

Technical Specification



Attribute	Specifications
• Machine Body	: Corrosion resistant main body
• Structure	: Rugged and Light weight at the same time
• Weight of couch roll	: 10 kgs
• Couch Roll	: Non Corrosive Material (Stainless Steel)
• Test Area	: 100 cm ²
• Sample Diameter	: 112 mm
• Depth of Cylinder	: 60 mm
• Diameter of rubber pad	: 145 mm
• Water level indicator in cylinder	: 10 mm and 25 mm



GSM Round cutter for paper and fabric (PT-106DIA113)

Compliance Standards

ASTM D3776, ISO 3801, BS 2471, BS 3424, IS 14716

Applications:

- Used to cut the samples in various industries for materials like Acrylic sheets, Aluminum foils, Bags & Luggage of Cotton, Pulp, Paper, Printing, Packaging etc.

Technical Specification

Attribute	Specifications
• Sample Area	: 100 cm ²
• Sample Diameter	: 113 mm
• Type of cut	: Standard
• Blade holders	: 4 Nos. Stainless Steel
• Blades	: Heavy duty Reversible Blades
• No of Blades	: 4 Nos
• Safety Lock	: Fine Brass Lock
• Hand wheel (Handle)	: Special Bakelite Handle
• Cutting pad	: New Rubber-Foam Pad

Details:

- The equipment consists of Sample cutter with safety catch lock and Long life cutting pads.
- The Sample Cutter has 4 Nos. of German reversible blades. The blades are reversible in design i.e. if one side gets blunt due to continuous usage, the blades can be turned to the other side. In this way, all the four sides of the blades can be used. Each blade has numbered sides from 1-4 for convenience in changing the blades.
- The unit is recommended for yield testing i.e. the determination of weight per unit area. The sample cutter cuts out rapidly and accurately circular specimen of 100 Cm², which is exactly 1/100th of a square meter with the depth of up to 5 mm. The result is grams, multiplied by 100, gives the GSM (Grams per square meter) directly.

Scuff Tester-Rub Proofness Tester (PT-107D)

Compliance Standards

BS 3110

Salient Features

- Works as a great comparator of variations in print quality between
- Power supply : 230 volts AC at 50 Hz (Fluctuation free power required)
- High torque Step Synchronous motors for precise RPM
- Higher Rub Resistance = better print quality.
- Lower Rub Resistance = poor print quality.
- Digital display of speed (RPM)
- Low power consumption
- Noise free scuff blower
- Non contact type digital counter
- Digital display of rubs
- Standard rubbing weight = 2 psi

Applications:

- To evaluate the Rub Proof-ness of prints on paper or board.
- To evaluate Colour Transfer from printed/coated surface during rubbing.
- To measure abrasion resistance of some Plastic materials/Aluminum Foils.

Supplied with following accessories:

1. Sample Marking Templates (2 Inch and 4½ Inch Sample)
2. Scissor
3. Glue Stick or similar quick drying adhesive



Motorized Package Drop Tester (PT-109)

Compliance Standards

IS : 7028 (Part IV), ISO 2248 (Method A), ASTM D5276, ISTA

Salient Features:

- Unique design
- Aesthetic exterior appearance
- Powder coated paint
- Motorized height adjustment and locking
- Pneumatically operated release lever
- Dual column structure with threaded ball screw for motorized operation
- For light packages up to 25 kg, (Which can be lifted manually and kept on the cradle)
- Robust base plate with rugged structure
- Programmed Hold and release button Within HMI Touch Screen
- Precise drop orientations
- Package width and height dimensions are not restricted
- Adjustable angle holder is provided with the device.

Note:

1. Please let us know maximum size of your Carton/Package, while placing the order.
2. Arrange compressed air @ 5-6 kg/cm², in case of Pneumatically release mechanism



Drop Height	1.5 Meter	3.0 Meter
Model Nos.	PT-109A1.5	PT-109A3

A : Automatic

Digital Crush Resistance Tester RCT / ECT / FCT/ PAT Tester (PT-110D)

Compliance Standards

TAPPI T808, T811, T818, T821, T809

Applications:

- To measure & indicate the compression strength of small cartons.
- Edge Crush, Flat Crush and Pin Adhesion properties of Corrugated Board.
- Ring Crush & Corrugating Medium Test (CMT) of Paper and Paperboard.

Salient Features:

- Electromechanical design.
- Bench top and user friendly model.
- Sophisticated Electronic Controls for precision and easy operation.
- Peak-hold facility, Low noise, Low maintenance, No wear-n-tear.
- Stepper Motor & Drive for Precise Speed Control.
- Supplied with attachments for carrying out Flat Crush, Edge Crush, PAT and Ring Crush test (At extra cost).
- Printer Port facility to generate printed report (80 column Dot Matrix printer to be provided by the user).
- RS 232 Port, with necessary software, to transfer data to computer (At extra cost).



Bottle Top Load Tester (PT-113)



Compliance Standards

ISO 8113:2004

Applications:

- To determine resistance of glass container, PET Bottles, HDPE Bottles, Confectionery Jars etc. against Vertical/Top Load

Salient Features:

- High Mechanical Stiffness
- Equipped with Microprocessor based Load Indicator, AC Motor & Variable frequency Drive
- Auto reverse upon maximum limit is reached or when sample breaks
- Comes to home position at the end of Auto-reverse
- Precise load cell with Load-cell module for better accuracy
- Equipped with Ball screw for friction less traverse
- Rotary encoder to obtain high accuracy in elongation measurement
- Easy to use display unit and software
- On screen display of Maximum Load, Breaking Load, Elongation, and Speed variations
- RS 232 Port, with necessary software, to transfer data to computer (At extra cost).

Safety Features:

- In built Over Load Safety
- Auto Reverse facility
- In built Over Travel Safety
- Auto Break

Technical Specification

Attribute	Specifications
• No. of screws	: Single screw mechanism, Bench top design
• Exterior Body Paint	: Powder coated in attractive shades
• Display	: Digital LCD Display
• Capacity	: 0 - 500 Kgf (0-5000 N) (5 KN)
• Load cell	: 'S Type' load cell of reputed make
• Vertical Clearance	: 300 mm
• Results displayed on screen	: Load, Elongation values, Testing speed and type of test
• Least count for elongation	: 0.01 mm
• Least count for load	: 10 grams (0.01 kg)
• Speed Range	: From 10mm/min to 200mm/min
• Load units	: Kg, Newton & KN as per selection
• Motor for speed variations	: Induction motor of reputed make
• Speed control	: Through Dedicated AC Frequency Drive
• Servo Motor Rating	: 750 Watts
• Load indicator facilitate with back light	: Microprocessor based load indicator cum controller
• Test jaws	: Compression Jaws as per ISO 8113
• Power Supply	: 230 Volt, 50 Hz, Single Phase, AC Supply

Selection Guide

Control System	Induction Motor Controlled System	Servo Motor Controlled System
Model Nos.	PT-113DI	PT-113DS

D : Digital, S : Servo, I : Induction

Vibration Tester for Packaging Material (PT-114D)

Compliance Standards

ASTM D999, TAPPI T17, IS 7028(part II)

Applications:

- To check Transport worthiness of packages.
- It simulates the vibrations and jolts subjected to various packages & products during transportation.

Salient Features:

- 4.3" Touch Screen HMI display
- Precise PLC control for accurate results
- Digital Timer for setting test run time
- Sample Slippage protection by rail on all sides
- Strong base plate with rugged structure
- Adjustable Frequency
- The damage caused by repetitive movement of the objects is replicated by the Vibration Table.
- User can set frequency and time and examine the damage caused by visual inspection on completion of test.

Electrical/Electronics:

1. Digital Timer with facility to Auto Stop after pre-set time
2. RPM Indicator
3. Emergency Off Button
4. 2 Pole MCB.



Selection Guide

Platform Size	500 W X 500 D MM	800 W X 600 D MM
Model Nos.	PT-114DS50	PT-114DL50

D : Digital, S : Small, L : Large

Pin Hole Tester for Film/Foil Roll (PT-116)

Consist of a Self Illuminated Chamber with Top Viewing Glass and Digital Counter.

Special Feature:

- Glass top is in slated position so that the viewing angle remains almost perpendicular to the viewing surface without any discomfort to the operator.
- The Digital Event Counter has an LCD/LED Display with an in-built battery. The expected life span of the battery is almost 10 years. With a Film / Roll holder on top or back of the system.
- Power: 230Volts AC. Max 250Watts.

Procedure of operation:

- Mount the film / foil roll on the holder at the top / back.
- Slide the film sample on the glass surface.
- Press the RESET switch for the Digital Event Counter
- Switch on the Power button. The CFL Lamp inside the chamber will glow.
- Count the number of visible pinholes (Light coming out of the pinholes)
- For every pinhole, press the COUNT Button once. This will increase the counts on the Digital Counter.
- Slide the film again and repeat the pinhole counting for 1 meter length.
- Report as No. of Pin Holes per Meter length.



Seal & Peel Tester (PT-115DP50SP)



Compliance Standards

ASTM F88, ASTM F904, ASTM D882

Applications:

- Paper/Kraft Paper tensile strength test
- Polyfilm tensile strength test
- Medical Packaging Tensile strength test
- Seal & Peel test of Adhesive bond of packaging material

Suitable for

- Interlaminar Bond Strength Test (T-Peel Test) - Fixture Included
- Seal Strength Test. - Fixture Included
- Tensile Strength & Elongation Test. - Fixture Included
- Coefficient of Static Friction - (Check optional accessories)
- Coefficient of Kinetic Friction - (Check optional accessories)

Salient Features:

- Bench Top Model
- Fitted with Microprocessor based Programmable Logical controller
- Peak Hold Facility
- Variable Travel speed
- Computer interface through RS-232 Connection
- Equipped with Ball screw for friction less traverse
- Rotary encoder for high accuracy in elongation
- Dedicated PC Software (User will have to arrange PC)
- You can get graph for load v/s elongation (stress v/s strain) and also get a excel sheet with a single click.

Safety Features

- In built Over Load Safety
- In built Over Travel Safety
- Auto Reverse facility
- Auto Break

Technical Specification

Attribute	Specifications
• Type of operation	: CRT (Constant rate of Traverse)
• No. of screws	: Single screw mechanism driven through motor & gearbox
• Load cell Capacity	: 50 Kgf (500 N) (0.5 KN)
• Load cell	: 'S Type' load cell of reputed make
• Display	: Digital LCD Display
• Vertical Clearance	: 300-500 mm
• Results displayed on screen	: Load, Elongation values, Testing speed and type of test
• Least count for load	: 2 Grams (0.02 N)
• Least count for elongation	: 0.01 mm
• Load units	: Kg/Newton as per selection
• Speed Range	: 10mm/min - 300mm/min
• Clamping pressure	: Adjustable upto 5 kg/cm ² (In case of Pneumatic Gripping)
• Software	: Specially designed Windows based Graphical Software
• Power Supply	: 230 Volt, 50 Hz, Single Phase, AC Supply
• Data Communication	: Through RS-232 Interface

Direct Reading GSM Balance (Grammage Tester) (EIE-GSM-203)

Compliance Standards

ASTM D3776, ASTM D5261

Electronic Grammage Tester (Microcontroller Based)

- Digital Quadrant Scale is intended for measuring the GSM of paper and other sheet materials by weighing a small test sample with given dimensions. The GSM of the specimen is being displayed directly on Digital Panel
 - Meter with accuracy 0.1 GSM.
 - Measuring range : 0 200 gm/m²

Applications:

- To check Transport worthiness of packages.
- It simulates the vibrations and jolts subjected to various packages & products during transportation.

Salient Features:

- Covered with Transparent Shield
- Stainless Steel tearing templates.
- Digital GSM Scale display direct weight in GSM in two range : 20 X 25 cm² and 10 X 10 cm² Templates
- Weight upto 0 200 gm with accuracy 0.1 gm.
- Plate Form Size 110 mm Dia.



Collapsibility Tester for Squeezing Aluminum Tubes (EIE-222)

Compliance Standards

IS: 7182-1973

Application:

- The test is required for assessing the functional quality of aluminum collapsible Tubes.

Details:

- A standard load is allowed to fall on the empty tube and the resistance offered to this load is measured.
- Designed For tube of diameter : 13.5 mm
- Grooving radius : 32 mm
- Grooving Depth : 5 ± 0.2 mm
- Distance b/w stopper & shutter : 32 mm
- Shutter weight : 70 ± 1 Gram
- The auxiliary base plate is to be inserted in the apparatus.
- Complete with stand, shutter mechanism and scale.



Laboratory Furnace (EIE-108)



Compliance Standards

ASTM D3776, ISO 3801, BS 2471, BS 3424, IS 14716

Applications:

- Particle size distribution

Salient Features:

- Ceramic fiber wool insulation to reduce weight and size of furnace.
- Less heat up time is
- Nominal heat-loss resulting in power saving
- Built in vent port for removal of noxious gases etc.
- Provision of hole with cover in the furnace door to insert temp sensor for calibration purpose
- Construction : CRC sheet - attractively powder coated
- Max Temperature : 1200°C
- Working Temperature : 1150°C
- Temperature control : Dual display microprocessor based Digital temperature indicator cum controller
- Temperature Sensor : K - type sensor
- Heating elements : KANTHAL A-1 wire in coil form placed in the Elements ribs & easily replaceable
- Circuit Wiring : As per CE Norms
- Operation on : 220/230 Volts, Single phase, AC Supply
- Available in following sizes

Inner chamber size (mm) (H x W x D)	Power consumption (Kw)	Approximate Weight (Kgs)	Digital Model Numbers (EIE-108DP)	Digital GMP Model Numbers (EIE-108DG)
225 x 100 x 100 (9" x 4" x 4")	1.5	60	EIE-108DP2.25	EIE-108DG2.25
250 x 125 x 125 (10" x 5" x 5")	2.0	71	EIE-108DP4	EIE-108DG4
300 x 150 x 150 (12" x 6" x 6")	3.0	82	EIE-108DP7	EIE-108DG7
300 x 200 x 200 (12" x 8" x 8")	5.0	115	EIE-108DP12	EIE-108DG12
450 x 225 x 225 (18" x 9" x 9")	6.0	125	EIE-108DP23	EIE-108DG23

D : Digital | G : GMP | P : Powder coating

Hot Air Oven (EIE-101)



Hot Air Oven (S.S.)



Hot Air Oven (S.S.)

Salient Features

- Double walled design
- Thick glass wool insulation to prevent heat loss
- Microprocessor based AUTO-TUNE PID Digital Temp Controller cum indicator
- Temperature range : 50 °C-250 °C
- Temperature Accu : ± 0.5 °C
- Temperature display : Digital LED Display
- Operates on : 230 Volts, 50 Hz, Single phase, AC Supply
- Special heavy duty stainless steel lock and door hinges
- Heavy duty stainless steel trays for sample placement
- Forced air circulation blower for Uniform Temperature Distribution
- Supplied complete with Calibration certificate, IQ-OQ-PQ Documents and test report
- Calibration certificate with NPL Traceability for temperature sensor and Digital controller
- Available in following sizes

Selection Guide

Inner chamber size(cms) (D x W x H)	Overall dimensions (cms) (D x W x H)	No of trays	Chamber capacity (Liters)	Power consumption (Kw)	Approx Weight (Kgs)	Digital Model Numbers (EIE-103DP)	Digital GMP Model Numbers (EIE-101DG)
30 x 30 x 30	52 x 45 x 64	1	27	1	45	EIE-101DP27	EIE-101DG27
35 x 35 x 35	57 x 50 x 72	1	64	1	52	EIE-101DP64	EIE-101DG64
45 x 45 x 45	67 x 60 x 82	2	92	1.5	72	EIE-101DP92	EIE-101DG92
45 x 45 x 60	67 x 60 x 97	2	121	1.5	78	EIE-101DP121	EIE-101DG121
60 x 60 x 60	82 x 75 x 97	3	216	2	110	EIE-101DP216	EIE-101DG216
60 x 60 x 90	82 x 75 x 125	3	324	2.5	148	EIE-101DP324	EIE-101DG324

D : Digital | T : Thermostatic | G : GMP | P : Powder coating Note : Customized sizes are also available

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Data & Design are subject to change without notice. Di-18-07-2022 Qty:



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