



- ▶ **Carton Compression Tester TP-I1 Series**
- ▶ **Paper Air Permeability Tester TP-J10**
- ▶ **Internal Plybond Tester TP-J11**
- ▶ **Puncture Strength Tester TP-J12**
- ▶ **Paper Tearing Tester TP-J20**
- ▶ **Electronic Tearing Tester TP-J21**

Carton compression tester TP-II series

Carton compression tester TP-II series with 100mm/min return speed level measures the compressive strength of carton box. The compressor tester, adopted with ARM chip, powerful data functioning system, advanced sensor and automatic tracking system for test operations. The test results are recorded automatically, the real-time display is used to view the test data and is transferrable to computer.

Features

- Touch screen display
- Customized design as per user's need
- Use of high precision pressure sensor for accurate measurement
- Tests the maximal strength of box using 'Strength test'
- Data presetting to test the strength & variant of the carton box 'Definite value test'
- Stacking test is performed within 12 or 24 hours
- Adopted with whorl and guide pillar for stability

Application

Carton compression tester is used to determine compression strength & estimate stacking test of transport packages such as corrugated carton, paperboard box etc.

Specifications

| Model no. | TP-I | TP-II |
|--------------------------------------|-------------------------|--|
| Measuring range | 0.1 to 10 kN | 1 to 50 kN |
| Indication error | < ± 1% | |
| Platen Size | 500×500 mm (customized) | 800×800 mm/ 1000×1000 mm/ 1200×1200 mm/ 1500×1500 mm (customized) |
| Operating stroke | 500 mm (customized) | 800 mm/ 1000 mm/ 1200 mm/ 1500 mm (customized) |
| Compression speed | 10 mm/ min | |
| Speed adjustment range | 2 to 100 mm/ min | |
| Track & force speed in stacking test | 2 mm/ min | |
| Power supply | AC 220 V ± 10 %, 50 Hz | |

Paper air permeability tester TP-J10

Paper air permeability tester TP-J10 is designed to measure the air permeability under specified conditions with time & unit pressure difference. It measures the average air flow through the unit area of the sheets. It is incorporated with standard 'Paper porosity method' used to test paper permeability. It is suitable for paper porosity with 1×10^{-2} to $1 \times 10^2 \mu \text{ mV}$ ($\text{Pa} \cdot \text{s}$) range, and not suitable for large rough texture paper.

Features

- Measuring range 0 to 1000 ml/min
- Measure air permeability of different type of papers
- Delicate benchtop standing model design
- Incorporated with 'Paper porosity method'
- User-friendly operations

Application

Paper air permeability tester is used to measure air permeability of papers like cement sack paper, craft paper, cable paper, copy paper and industrial filter paper used in paper, packaging, craft industry.

Specifications

| Model No. | TP-J10 |
|-----------------------------|---|
| Measuring range | 0 to 1000 ml/min |
| Test area | $10 \pm 0.02 \text{ cm}^2$ |
| Area differential pressure | $1 \pm 0.01 \text{ kPa}$ |
| Inner diameter of grip ring | $35.68 \pm 0.05 \text{ mm}$ |
| Dimension (B*D*H) | $410 \times 300 \times 1160 \text{ mm}$ |
| Weight | About 15kg |

Internal Plybond Tester TP-JII

Internal plybond Tester TP-JII is used to test the Z direction tensile internal (interlayer bonding) bonding strength of various paperboards. The instrument design is based on a falling pendulum which creates a high speed impact on a paper specimen. The test paper sample is impacted by certain angle and weight. The energy absorbed by the paper indicates the internal bonding strength of that paper.

Features

- 90° Impact angle
- Tests 5 sample at a time
- LCD digital display
- Magnetic pendulum release

Application

Internal ply bond tester is used to test tensile bonding strength in paper, corrugated paper & packaging industry.

Specifications

| Model no | TP-JII |
|---------------|---|
| Capacity | A: 20 to 500 J/m ² B: 500 to 1000 J/m ² |
| Impact angle | 90° |
| Unit | Lb-ft/in ² J/m ² |
| Error | (A: ±1 J/m ²) and (B: ±2 J/m ²) |
| Sample amount | 5 pcs |
| Dimension | 700*340*600 mm |
| Net weight | 92 g |

Puncture strength tester TP-J12

Puncture strength tester TP-J12 has electrical mechanical integration design, with compact structure, easy maintenance. The puncture tester has an open design, simple operation, automatic measurement with high accuracy and stable performance gives reliable results. It is designed in a way to avoid any vibration that would affect the test values.

Features

- Puncture head with stainless steel right-angled triangular pyramid attached to solid arm design
- Automatic measurement, intelligent operation system
- Counts & print the test results
- Data storage function
- Thermal micro-printer with high printing speed and low failure rate
- Easy to use English interface

Application

Puncture strength tester is an essential instrument used in paper and cardboard box manufacturing plants, industry.

Specifications

| Model no | | TP-J12 |
|-----------------------|---|---|
| Measurement range | A | (1 to 6) J Indicating error ± 0.05 J |
| | B | (1 to 12) J Indicating error ± 0.05 J |
| | C | (1 to 24) J Indicating error ± 0.05 J |
| | D | (1 to 48) J Indicating error ± 0.05 J |
| | The indicating errors w.r.t measurement range of 20 to 80 % | |
| Frictional resistance | | < 0.25 J |
| Pyramid dimension | | Three sides: $60 \times 60 \times 60$ mm, height 25 ± 0.7 mm, Arris edge fillet radius 1.5 ± 0.1 mm |
| Dimension | | $800 \times 470 \times 840$ mm |
| Weight | | 185 kg |
| Power supply | | AC220 V $\pm 10\%$, 50 Hz |

Paper Tearing Tester TP-J20

Paper tearing tester TP-J20 is an advanced instrument used for testing tearing strength of the paper and paperboard. This tearing tester comes with 43 ± 0.5 mm tearing distance and 104 mm long tearing arm to locate paper material properly & perform the tearing test.

Features

- Compact, portable design
- Stainless steel right-angled triangular pyramid attached to solid arm design
- Tearing angle 27.5° with $\pm 0.5^\circ$ precision
- User friendly operations

Application

Paper tearing tester has applications in determining tearing resistance property of paper films, sheets, woven materials, polypropylene, polyester, paper, cardboard, textile material sheets etc.

Specifications

| Model no | TP-J20 |
|------------------|----------------------------|
| Measuring range | 0 to 1000 mN |
| Resolution | 0.1 mN |
| Indication error | $\pm 1\%$ |
| Tearing arm | 104 ± 1 mm |
| Tearing angle | $27.5^\circ \pm 0.5^\circ$ |
| Tearing distance | 43 ± 0.5 mm |

Electronic tearing tester TP-J2I

Electronic Tearing tester TP-J2I is adopted with advanced and supporting components, single-chip microcomputer and has reasonable structure and multi-function design. The variety of parameters included in electronic tester are standard test, conversion, adjustment, display, memory, print and other functions. This electronic tearing resistance tester is suitable for all kinds of paper and some kinds of cardboards.

Features

- High precision angle sensor to ensure rapid collection of data
- Micro-printer, easy to print test report
- Flexible configurations to reach different functions
- Touch screen display
- Connected to PC for data transfer
- Compact structure design
- Easy for maintenance

Application

Electronic Tearing tester is used to test tearing strength of paper material, paper and sheets, cardboards etc. in paper and packaging, textile industry.

Specifications

| Model no. | TP-J2I |
|------------------|--------------|
| Capacity | 10 -16000 mN |
| Resolution | 0.1 mN |
| Tearing arm | 104 ± 1 mm |
| Chips distance | 180 mm |
| Tearing angle | 27.5° ± 5° |
| Clamp- paper | 28 ± 0.3 mm |
| Resection length | 20 ± 0.5 mm |
| Weight | 20 kg |