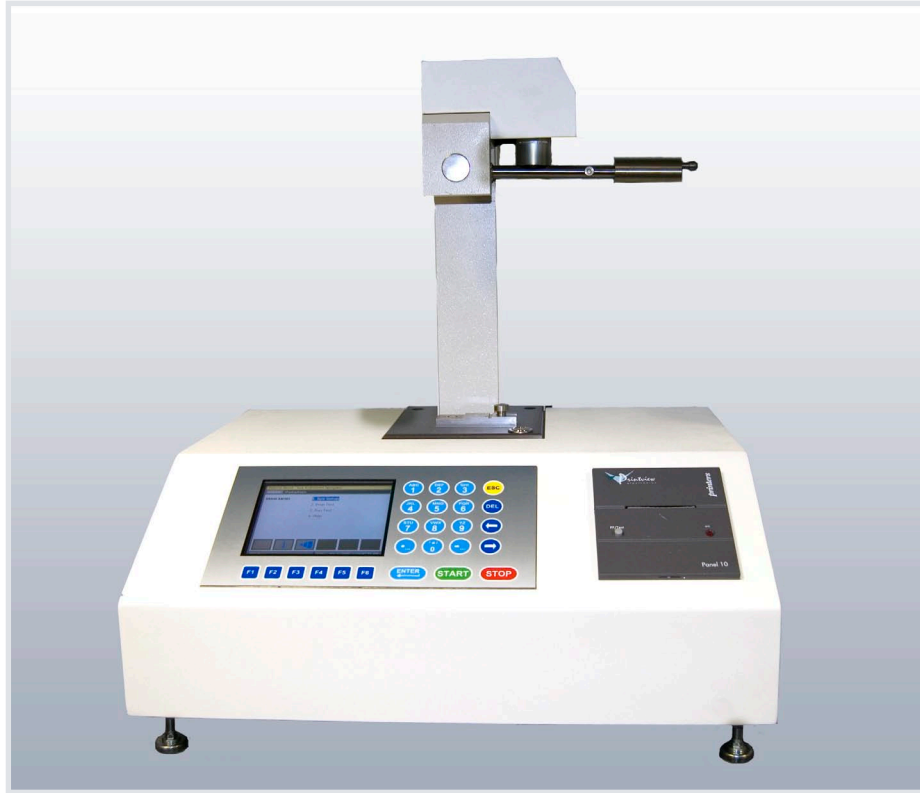


# INTERNAL BOND™ TESTER

## 80-20-00



The **NEW Internal Bond™ Tester** is designed to determine the internal bond strength of a variety of Paper and Board materials according to TAPPI T 569. The instrument design is based on a falling pendulum which creates a high speed impact on a paper specimen. The paper specimen is sandwiched between two double-coated tape substrates. The pendulum impact measures the total energy required to delaminate the internal fibers of a specimen in a "Z" type direction into two separate piles. The system also incorporates an automatic sample preparation station which allows five specimens to be accurately prepared simultaneously.

### FEATURES

- Storage and editing of up to 500 readings
- Selectable units (ft.lb/in<sup>2</sup>, J/m<sup>2</sup> and kg•cm)
- RS-232 serial output
- Report printout with built-in printer
- Magnetic hammer release and magnetic brake
- Automatic calibration
- Automatic specimen hold-down during test sequence
- Settable limits, statistics-average, standard deviation, high/low results
- Automatic cutting of samples saves you time and keeps you safe
- 5.7 inch LCD color display with 320 x 240 resolution
- 15 Character alphanumeric keypad
- 6 function keys for easy test setup
- 10 soft key icons allow simple intuitive navigation of test functions
- Conforms to TAPPI standard T 569

### APPLICATIONS

Newsprint, Fine Paper, Liner Board, Book Stock, Carton Board, Medium, Coatings, Laminates

## I-BOND PREP STATION

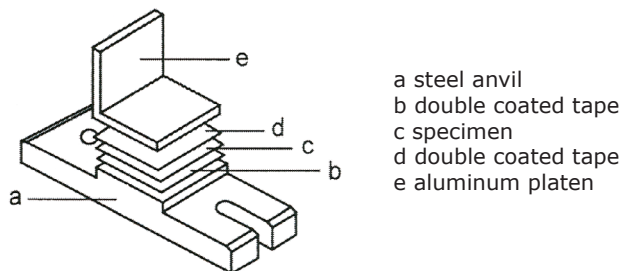


▲ *I-Bond Prep Station included*

### Sample Prep Station

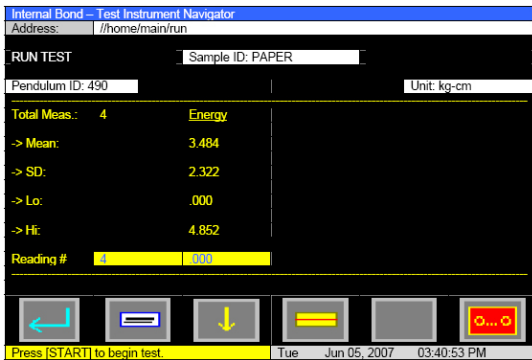
A precision sample Preparation station with digital display and direct read out in kPa and psi units is available to prepare up to 5 test pieces at the same time. The Sample Prep Station is supplied to provide a consistent adhesive transfer when pressing the test specimen between the double-sided tape and aluminum platens.

Included with the Sample Prep Station are 5 aluminum platens with a sample size of 25.4 x 25.4 mm (1.0 x 1.0 inches). The clamping pressure is adjustable from 345 kPa (50 psi) to 1379 kPa (200 psi). During the pressing operation a selectable dwell time can be set by the operator from 0-4 seconds. The factory setting is 3 seconds in accordance with TAPPI T 569. The system is designed with a reinforced anvil to prevent deflection during sample preparation.

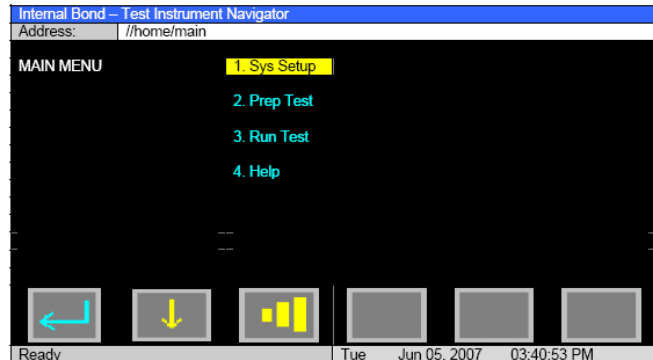


▲ **Figure shows specimen sandwiched between two double-coated tape substrates**

## SOFTWARE PROGRAM



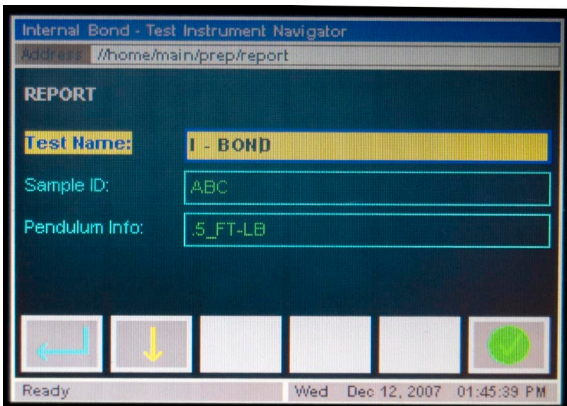
▲ Test result display



▲ Setup Menu

## SOFTWARE PROGRAM

- Screen display
- Provides a web-like page navigation menu driven user interface.
- Normal Mode
- Calibration mode



▲ 5.7 inch LCD color display with 320 x 240 resolution



▲ 15 Character alphanumeric keypad

## INSTRUMENT SPECIFICATIONS

<b>Model</b>	80-20-00-0001
Ranges	0 -1050 J/m <sup>2</sup> (0 – 500 ft.lb x 10-3 ), 0 – 1575J/m <sup>2</sup> (0 - 750 ft.lb x 10-3 ) and 0 – 2100 J/m <sup>2</sup> (0 - 1000 ft.lb x 10-3 )
Pendulum Release	Magnetic
Peak/Angular Resolution	0.04°
Standard	½ ft.lb/in <sup>2</sup> pendulum standard, ¾ ft.lb/in <sup>2</sup> and 1 ft.lb/in <sup>2</sup> available for stronger materials.
Options	¼ ft.lb/in <sup>2</sup> and other weights also available
Results directly in	ft.lb/in <sup>2</sup> , J/m <sup>2</sup> , kg•cm
Statistics	Average, Standard Deviation, Minimum, Maximum and Calibrate function

### Physical Specifications (Instrument)

Weight	23 kg (51 lb)
Dimensions (W x D x H)	53.3 x 40 x 60.3 cm (21 x 15.7 x 23.7 in)

### Machine Requirements

Air	Instrument quality 700 kPa
Electrical	90-264 VAC 50/60 Hz

## PREP STATION SPECIFICATIONS

Pneumatic clamping force	50-200 psi
Dwell time	1 to 4 seconds
Sample Press Timer	user adjustable 1-4 seconds
5 Aluminum platens	sample size of 25.4 x 25.4 mm (1.0 x 1.0 inches)
Sample thickness range	up to 1.25 mm (0.050 inches)
Clamping pressure adjustment	345 kPa (50 psi) to 1379 kPa (200 psi)
Clamping pressure resolution	7 Kpa (1 psi)
Clamping pressure control	at 690 kPa (100psi) is better than ± 21 kPa (7 psi) at 1034 kPa (150psi) is better than ± 34 kPa (5 psi)

### *Reinforced anvil system prevents sample deflection during preparation*

### Physical Specifications (Prep Station)

Weight	22.7 kg (50 lb)
Dimensions (W x D x H)	33.5 x 26.7 x 37.1 cm (13.2 x 10.5 x 14.6 in)

**Meets** TAPPI T569 om 07 Internal bond strength (Scott type) This method defines a test that measures the energy required to rapidly delaminate a sheet-type specimen.

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