



# Internal Bond™ Tester

## Model 80-20



**Model 80-20-02**



**80-30 Ibond Prep Station**

The **Internal Bond™ Tester** is designed to determine the internal bond strength of a variety of Paper and Board materials according to TAPPI T 569 and ISO 16260. 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 plies.

**An automatic sample preparation station (Model 80-30)** is available which allows five specimens to be accurately pressed and cut simultaneously. The prep station includes a safety enclosure over the cutting blades, eliminating the use of box cutting knives to separate the individual test specimens.

### FEATURES

- 7” inch full-color digital touchscreen display
- Storage and editing of up to 100 readings including average and standard deviation
- Selectable units (ft.lb/in<sup>2</sup>, J/m<sup>2</sup> and kg•cm)
- Easy-to-use one button operation for clamping anvil and starting test
- Report printout with built-in printer
- Magnetic hammer release
- Automatic calibration
- Ability to create, edit and save test procedures
- Automatic specimen hold-down during test sequence
- RS-232 serial output

- Universal power supply for 110V / 220V operations
- Automatic pendulum brake after test (optional)
- Calibration block set for verifying calibration (optional)

### APPLICATIONS

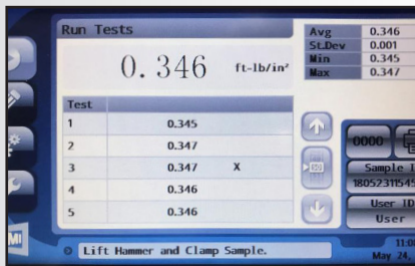
Newsprint, fine paper, liner board, book stock, carton board, medium, coatings, laminates

### STANDARDS

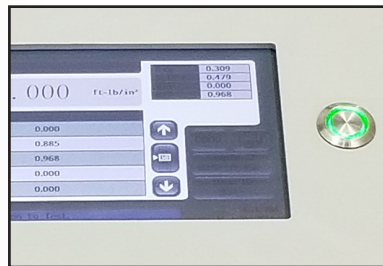
- Conforms to TAPPI standard T 569
- ISO 16260 Paper and Board – determination of internal bond strength

# Internal Bond™ Tester

## Model 80-20



Test settings, results and statistics are easily accessible from the main screen



Easy one-button operation for clamping anvil and start of test



Optional set of verification blocks to check machine operation

### Calibration Block Set

80-20-01 calibration block set is available for verifying calibration. The block set can be used with each of the 3 available pendulums. A force verification document for each range pendulum is included.

A set of 5 verification blocks are provided to check the operation. The block set is a proven method to insure the instrument is operating correctly. The verification procedure includes a support fixture which is clamped onto the base and supports the block. The verification block rests in the support fixture. When the pendulum swings, it contacts the block. When the block is impacted by the pendulum, the system measures the force/resistance to move the block from the support fixture.

| SPECIFICATIONS                 |   |
|--------------------------------|---|
| <b>Model</b>                   | 80-20-02-0003 Ibond tester without brake<br>80-20-02-0004 Ibond tester with brake   |
| <b>Ranges</b>                  | 0 – 841 J/m <sup>2</sup> (0 -400 ft.lb x 10-3)<br>315 – 1575 J/m <sup>2</sup> (150 - 750 ft.lb x 10-3)<br>420 – 2100 J/m <sup>2</sup> (200 - 1000 ft.lb x 10-3) |
| <b>Pendulum Release</b>        | Magnetic  |
| <b>Peak/Angular Resolution</b> | 0.04"   |
| <b>Results Units</b>           | ft.lb/in <sup>2</sup> , J/m <sup>2</sup> , kg•cm  |
| <b>Statistics</b>              | Average, standard deviation, minimum and maximum  |
| <b>Weight/Dimensions</b>       | 23 kg (51 lb) / (W x D x H) 53.3 x 40 x 60.3 cm (21 x 15.7 x 23.7)  |

| PENDULUMS (Must be ordered separately, please specify) |  |
|--|--|
| <b>80-20-04</b>  | 0.4 ft.lb/in <sup>2</sup> pendulum assembly (standard range) |
| <b>80-20-02</b>  | 0.75 ft.lb/in <sup>2</sup> pendulum assembly                 |
| <b>80-20-03</b>  | 1.0 ft.lb/in <sup>2</sup> pendulum assembly specifications   |

| OPTIONS             |  |
|---------------------|--|
| <b>80-20-01</b>     | Calibration Block Set                      |
| <b>80-20-02-001</b> | Ibond update kit (upgrade existing models) |

