

# Box Compression Tester

Model: B0003

*a measurable difference...*

**IDM**<sup>®</sup>  
instruments

The Box Compression Tester is a floor-mounted machine where a complete pallet can be loaded into the machine. It is designed to evaluate packages and material under compressive loads. Two platens are supplied with the machine as standard, an 800 x 800 x 50mm and a floating aluminium platen 1220 x 1220 x 50mm.

The floating platen can be removed and put aside if smaller items are tested constantly. The Box Compression Tester uses a hydraulic cylinder and servo system to apply a precise linear motion and force.

## Applications:

- Box Compression
- Stack Testing
- Multi-box Compression

## Features:

- **Force:** A precision load cell is used to Measure the applied force and a precise linear transducer measures the test sample deflection.
- **Construction:** The construction is of a Strong 'A' frame type.
- **Crosshead Assembly:** Motor driven ball screws, for fast and accurate operation, reposition the crosshead assembly.
- **Power Pack:** The Power pack and hydraulic controls are in a stand alone cabinet, hoses and control cables plug into it.

## Computer Software:

The software is based on the worldwide-recognised National Instruments LabVIEW Program and Tester Program developed by IDM Instruments.

1. Data sampling is adjustable from 1-1000 Hz
2. Test parameters displayed with graph simultaneously
3. Overlay display of data curve possible during test
4. AS and ASTM Test Methods pre-programmed
5. Other test methods can be programmed by the operator
6. Calibration File to calibrate the unit to NATA requirements
7. Position, Load or Strain rate control
8. Real time graphic display of data
9. Selectable graphical display presentation
10. Data can be sent to Excel
11. Out of range alarm and stop
12. Auto return after a test is selected
13. RS232 output.



## Standards:

- AS130-1-800s
- ASTM D642
- ASTM D4169
- TAPPI T804
- ISO 12048:1994

# Box Compression Tester

Model: B0003

*a measurable difference...*



## Data Output:

1. Force & Deflection
2. Digital display, peak load/position
3. Digital display & XY Graph
4. Statistical Output (on screen or print)
5. Print options: any test screen or statistics.

## Auto Set Up:

1. Auto Zero
2. Preload
3. Stop
4. Position
5. Home Position

## Operation: Automatic or Manual

1. Move force plate to loading position
2. Load Test Sample
3. Go to preset height
4. Start test with preset parameters
5. After sample collapse, return to loading
6. All data collected and operator asked to accept or reject.
7. Print: Yes/No Store: Yes/No

## Specification:

- Maximum capacity: 100 kN
- Force Resolution: 100.00 x 0.01 x kN
- Force Accuracy: 0.25% F.S.
- Position Accuracy:  $\pm 0.1\%$  F.S.
- Maximum test area: 1220 D, 1220 W, x 2500 H mm
- Position Repeatability: 0.2 mm
- Resolution: 2000.0
- Position measuring accuracy: 0.1 mm
- Hydraulic Servo Drive
- Variable Test Speed: 0.1- 250 mm/min
- Speed accuracy: 0.5% F.S.
- Crosshead Positioning: 500 mm/min
- Platen size: 1200mm x 1200mm & 800mm x 800mm
- Testing Stroke: 300mm
- Overall Base Plate: 1675 W, 1220 D, 50 H mm
- Overall Height: 3450mm
- Test Unit Weight: 5,000 Kg approx.
- Voltage Supply: 2 x 240V AC 10 A
- Package stand to test smaller items included

## Benefits:

- Easy to use
- Fast results
- Accurate
- Reduce waste material

## Options:

- B0003 – LP – 2000  
2000 Kg Load Platform
- Portable Laptop

## Connections:

- **Electrical:** 220/240 VAC @ 50 HZ  
110 VAC @ 60 HZ  
415 VAC @ 50 HZ Three Phase  
220 VAC @ 60 HZ Three Phase  
*(please specify when ordering)*

## Control Dimensions:

- **Control System:** 600 x 600 x 1600mm approx.
- **Hydraulic P/S:** 600 x 600 x 1500mm approx.

## Dimensions:

- **H:** TBA
- **W:** TBA
- **D:** TBA
- **Weight:** TBA