

# Box Compression Tester

## Usage

For carrying out compression tests on packing boxes.

## Applicable Standards

DIN EN 22872, ISO 12048, TAPPI T804, UNE 57163/5, FEFCO N°50, AFNOR, H13-001

## Characteristics

- High rigidity steel frame
- The guiding of the movable plate is made by means of four cylindrical column-guide and low friction linear bearings.
- Two low friction balls spindles
- Force capture system equipped with 3 load cells placed under the lower plate
- Driven by D.C. Servo-motor and reductor to achieve stable speeds in the full scale
- Emergency push button
- Possibility of two types of upper movable plate : fix and parallel to the inferior plate and movable with omni-directional ball, oscillating plate
- Optical deformation encoder
- Configuration of testing and approaching speeds between 1 and 400 mm/min.
- Security: Electronic (program) and physical (limit switches) protection against overload
- RS-232 interface for connection to management and control programs
- Force readings with a resolution of 0.004 % of the FS, and extension readings with a resolution of 0.01 mm.
- Accuracy

## User interface

- Machine controlled by means of a touch screen and two auxiliary buttons.
- Through the visualization and control screen, the total control and configuration of the machine can be managed.
- Easy and intuitive operation of the control menu, configurable in different languages.
- Possibility of selecting and defining multiple test results. Two result tables with a maximum of 10 result





Figure: Platens with sample box

- types and 20 test results per table.
- Possibility of display the test results in graphic way.
  - Statistical control. Mean value, standard deviation and maximum and minimum values.
  - Different configurable units for the force, extension and speed parameters.
  - Test maneuver with automatic return to initial position at maximum speed (400 mm/min).
  - Setting of different breaking and preload levels.
  - Periodical programme updatings (without additional costs).

### Test descripton

The corrugated box or packaging to be tested must be placed centered in the lower plate of the compression tester. When the test begins, the upper plate will displace downward and a load will begin to be applied to the specimen. This force is captured by means of the three load cells located under the lower plate. When the system detects the sample breaking, the upper plate returns to the initial position at maximum speed.

### Software control (optional)

The machine, through its RS-232 connection, allows the total control and management of the test by means of the NOVILOG software. It will be possible to preset tests, save test results, graphical curves, carry out test reports, etc.

### Models

The Box Compression Tester BCT can be manufactured with different plates sizes and force ranges. Consult your provider about special dimensions.

### Connections

Electricity: 110 - 220V, 50-60Hz



Figure: Touch screen controlled operation and display of results, stats and graphs.