

# Compression Tests on Dimensionally Stable Packagings like Boxes, Barrels, Cartes a.s.o.

**Servo-hydraulic compression testing machine with extra large compression platens and extra high testing chamber for testing of packagings with large dimensions.**

The testing machine is specially configured according to the customer requirements for testing of different packagings:

- **Determination of the inherent rigidity:**  
Here the force is measured, which a packaging can absorb and remove without buckling. The BCT - box compression test value can be calculated. This value of cardboard especially depends on the humidity in the air and in its own.
- **Determination of the stacking characteristics:**  
A force application until failure on several packagings allows to calculate the maximum allowed stacking height. The testing system allows to run tests with empty or filled packagings - important when filled with a

liquid. Tests are run with a predefined load over a predefined amount of time or with a constant increase of the applied force until failure.

## Tests and Samples

- **Packagings like**
  - Barrels
  - Beverage crates
  - Plastic boxes
  - Cardboard boxes
  - Pallets
  - Buckets
  - Containers
- **Compression tests for the determination of**
  - inherent rigidity
  - stacking characteristics
  - dimensional stability

## Testing System

- Servo-hydraulic compression testing machine Type D - S 1000 kN - S
- Rigid 4-column-construction
- Compression platens 1000 x 1000 mm
- Testing chamber height 1200 mm
- Testing force max. 1000 kN

## Control and Measurement

- Test procedure in closed loop mode in connection with servovalve, digital controller **DIGICON 2000**
- PC running materials testing software **PROTEUS** for automatic test control, data acquisition, evaluation and print-out of test reports
- Precision load cell for accurate force measurement
- Integrated digital displacement transducer in the testing actuator



w+b