

TECHNICAL BROCHURE

BOX COMPRESSION TESTER

model P-4000S

Box compression strength is a fundamental property for ensuring the overall structural integrity of corrugated board packaging, directly influencing its performance and safety during stacking, storage, and logistics transportation across the supply chain.

The P-4000S was specifically designed to perform box compression testing on boxes of various sizes with a high degree of accuracy, repeatability, and reliability. As a key solution for product development and strict quality control processes, the equipment delivers a precise evaluation of box failure load, critical deformation, and overall stacking behavior under applied loads.



KEY FEATURES

- » **Robust construction designed for long-term reliability**, ensuring consistent performance in laboratory and industrial environments.
- » **Robust mechanical construction combined with an advanced measurement system** ensures perfect parallelism in load application, delivering highly reliable results.
- » **Test platen mounted on four high-precision load cells**, ensuring maximum repeatability and accuracy in readings.
- » **High operational flexibility**, with fully programmable preload, pre-deformation, and load application time parameters.
- » **Regmed equipment**: a global reference for over 65 years in laboratory solutions for physical testing of pulp, paper, and packaging materials.



MAIN APPLICATIONS

- » Determination of the maximum load up to box failure, using programmable preload.
- » Evaluation of critical deformation and structural behavior using adjustable pre-deformation.
- » Simulation of long-term stacking tests through programmable load hold time.
- » Routine quality control and support for packaging Research & Development (R&D) processes.



TECHNICAL STANDARDS

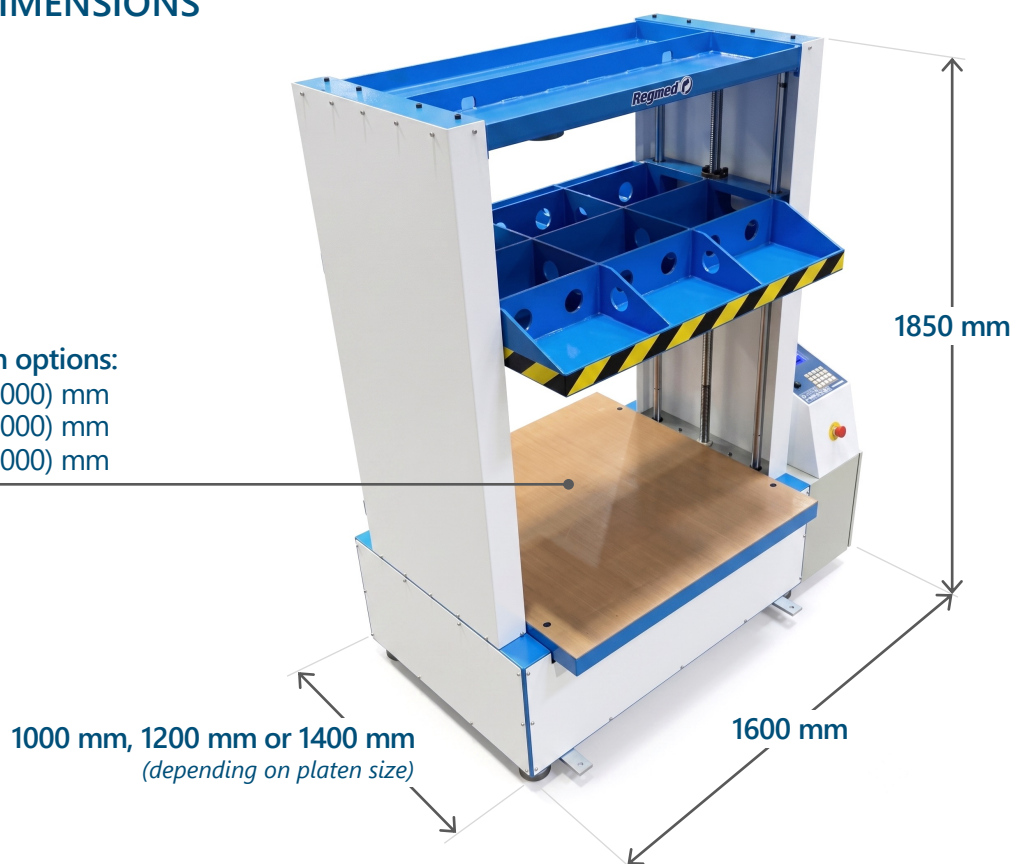
- » ISO 12048
- » TAPPI T-804
- » ASTM D 642
- » ASTM D 4577

* Due to continuous development, this equipment is subject to change without prior notice.



DIMENSIONS

03 platen options:
(1000 x 1000) mm
(1200 x 1000) mm
(1400 x 1000) mm



SPECIFICATIONS

Maximum capacity	4,000 kgf / 40,000 N <i>Optional: 5,000 kgf / 50,000 N</i>
Load reading resolution	0.1 kgf / 1 N
Measurement units	kgf or N
Test stroke between platens	1000 mm
Deformation reading resolution	0.1 mm
Programmable test speed	(5 to 25) mm/min
Positioning speed	300 mm/min
Power supply	220 VAC, 50/60 Hz, single or two-phase, 500 W
Equipment weight (net weight)	900 kg
Packaging (dimensions and gross weight)	(199 x 187 x 120) cm (H x W x D) / 1,080 kg <i>Considering model with (1000 x 1000) mm platens</i>

Features multilingual software (English, Spanish, and Portuguese), microprocessor-based electronics, alphanumeric display, and RS232 serial output for communication with a computer or local printer.

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ADDITIONAL IMAGES



Ample test area

Usable test area between 1.0 m³ and 1.4 m³, depending on the selected platen option, with easy access from two sides of the equipment.



Reinforced structure

Robust mechanical construction that ensures perfect parallelism in load application, delivering highly reliable results.



Control center

Control panel, display, and easily accessible emergency stop button, ergonomically located next to the test area.

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