

Box Compression Tester

P-4000S

Box compression strength is fundamental to the structural integrity of corrugated packaging. It determines how well a box performs, and how safely it holds up, through stacking, storage, and transport across the supply chain.

The P-4000S tests boxes of various sizes with high accuracy, repeatability, and reliability. Built for both product development and quality control, it precisely measures box failure load, critical deformation, and stacking behavior under load.

Designed for long-term use in both laboratory and industrial environments, its rigid mechanical structure keeps load application parallel, and the test platen is mounted on four high-precision load cells for accurate, repeatable readings. Preload, pre-deformation, and load hold time are fully programmable, so the same machine handles routine quality control, failure testing, and long-term stacking simulations.

Main Applications for Box Compression Testing:

- 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.



Applicable Standards:

- ISO 12048
- TAPPI T804
- ASTM D642
- ASTM D4577



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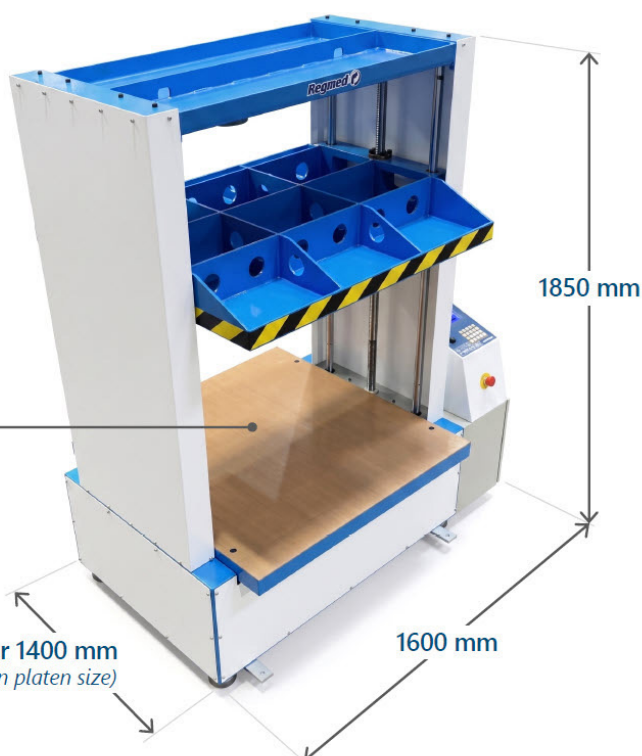


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03 platen options:
(1000 x 1000) mm
(1200 x 1000) mm
(1400 x 1000) mm

1000 mm, 1200 mm or 1400 mm
(depending on platen size)



Specifications

Maximum capacity	4,000 kgf / 40,000 N Optional: 5,000 kgf / 50,000 N
Load resolution	0.1 kgf / 1 N
Selectable testing units	kgf or N
Stroke length (programmable)	0–1000 mm
Deformation resolution	0.1 mm
Testing speed (programmable)	5–25 mm/min
Positioning speed	300 mm/min
Programmable test parameters	Preload, pre-deformation, and load hold time
Compression plates	1000 x 1000 mm Optional: 1000 x 1200 mm and 1000 x 1400 mm
Power supply	220 VAC, 50/60 Hz, single or two-phase, 500 W
Dimensions	1600 x 1850 mm (W x H) Depth: 1000, 1200, or 1400 mm, depending on platen size
Equipment net weight	900 kg
Packaging dimensions & gross weight	199 x 187 x 120 cm (H x W x D) 1,080 kg with 1000 x 1000 mm platens
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