Z-Directional Tensile Fixture for Paper and Board

Built to ISO 15754 — Paper and board — Determination of z-directional tensile strength



OVERVIEW

Die-set style fixture for z-directional tensile testing of paper and board. Specimens are bonded with double-sided tape between upper and lower platens, pressed together under guided alignment, then pulled apart perpendicular to the sheet plane; a sliding multi-position platen tests several specimens in sequence.

KEY FEATURES

- Guide posts and bushings keep upper and lower platens parallel
- Multi-position lower platen on linear slide tests five specimens in sequence
- Indexed positions for repeatable specimen placement
- Same fixture applies the compression step and the tensile pull
- Supplied with adapters to suit your load frame (clevis or threaded)

TECHNICAL SPECIFICATIONS

Test method	Z-directional tensile strength per ISO 15754
Test type / loading	Compression then tension normal to sheet plane
Specimens	Paper or board squares bonded with double-sided tape
Load capacity	5 kN standard; higher capacities on request
Fixture material	Anodized aluminium and stainless steel
Contact surfaces	Flat platens with numbered specimen positions
Machine connection	Pin adapter with locking collar, or threaded adapter
Compatible frames	Electromechanical and servo-hydraulic universal test machines

APPLICATIONS

- Paperboard and folding boxboard
- Linerboard and multi-ply board
- Coated papers and laminates
- Mill quality control

ABOUT THE STANDARD

ISO 15754 specifies a method for determining the z-directional tensile strength of paper and board, the resistance to delamination perpendicular to the sheet plane. The specimen is bonded between two platens with adhesive tape, compressed, then pulled apart. The result is the z-directional tensile strength in kPa, an indicator of internal bond.

Ordering & customization: Specify specimen size, number of positions, tape type, required capacity and machine connection when ordering.

Specifications are typical and may vary by configuration; confirm at time of quote. Users should refer to the current edition of the standard for test procedures. Part ref. UGC-ISO15754-TG