

Tension Fixture for Small Clear Timber Specimens

Built to ASTM D143 — Standard Test Methods for Small Clear Specimens of Timber



OVERVIEW

Tensile fixture for small clear timber specimens. Shaped grips engage the ends of the specimen so that load is applied axially without crushing the wood, and self-aligning linkages minimize bending. Designed for the tension tests of ASTM D143, where clean gauge-section failures are needed to determine tensile strength.

KEY FEATURES

- Shaped grips seat specimen ends without crushing fibers
- Self-aligning linkages minimize bending in the gauge section
- Robust construction for repeated timber testing
- Quick specimen insertion for test series
- Supplied with adapters to suit your load frame

TECHNICAL SPECIFICATIONS

Test method	Tension test of small clear timber specimens
Test type / loading	Monotonic tension at constant rate
Specimens	Shaped clear wood specimens per ASTM D143 geometry
Load capacity	10 kN standard; higher capacities on request
Fixture material	Steel, corrosion-resistant finish
Gripping surfaces	Shaped grips matched to specimen ends
Machine connection	Clevis pin or threaded adapter, to suit customer frame
Compatible frames	Electromechanical universal test machines

APPLICATIONS

- Wood species strength characterization
- Lumber grading research
- Engineered wood development
- University and forest products labs

ABOUT THE STANDARD

ASTM D143 covers the determination of mechanical and physical properties of wood using small, straight-grained specimens free of defects. Tests include static bending, compression parallel and perpendicular to grain, impact bending, toughness, hardness, shear, cleavage and tension parallel and perpendicular to grain. Results provide basic strength data for species comparison and engineering design.

Ordering & customization: Specify test type (parallel or perpendicular to grain), specimen geometry, required capacity and test 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-D143-TF