

Wood Test Fixtures

Tension Grips - Perpendicular to Grain

Catalog Number 2820-008

Features

- Meets ASTM D 143
- 10 kN (1,000 kgf, 2,250 lbf) force capacity
- Designed for 50 mm x 50 mm x 62 mm (2 in x 2 in x 2.5 in) specimens
- Open fronted design for ease-of-specimen insertion
- Simple shoulder loading design

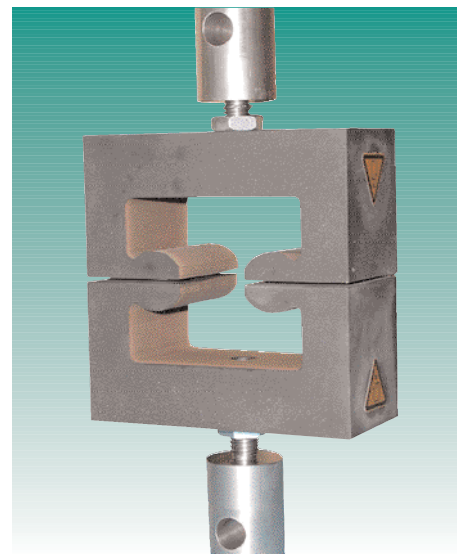
Description

The tensile strength of wood can be readily determined using these specially designed grips. They are designed to provide an accurate and easy-to-use method for assessing tensile strength perpendicular to the grain on different types of timber. The grips meet international standard ASTM D 143.

Principle of Operation

The grips consist of two steel specimen holders. The upper holder is attached to the load cell of the test system via a flexible coupling to provide optimum alignment. The lower holder mounts directly to the test machine base adaptor. The prepared specimen is simply inserted from the front into the holders which are designed to apply the test load to the specimen through its shoulders.

The force required to break the specimen is applied by moving the crosshead in the tensile direction.



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2820-008 tension grips - perpendicular to grain

Application Range

- Tensile strength of wood perpendicular to the grain according to ASTM D 143

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Specifications

| | |
|------------------------------|------------------------------|
| Catalog Number | 2820-008 |
| Maximum Capacity | 10 kN (1,000 kgf, 2,250 lbf) |
| Mechanical Connection | |
| Upper Fitting | ½ in clevis pin (Type Dm) |
| Lower Fitting | ½ in clevis pin (Type Dm) |
| Overall Width (A) | 114 mm (4.5 in) |
| Effective Length (B) | 190 mm (7.5 in) |
| Weight | 2.5 kg (5.5 lb) |
| Temperature Range | Room temperature |

Notes:

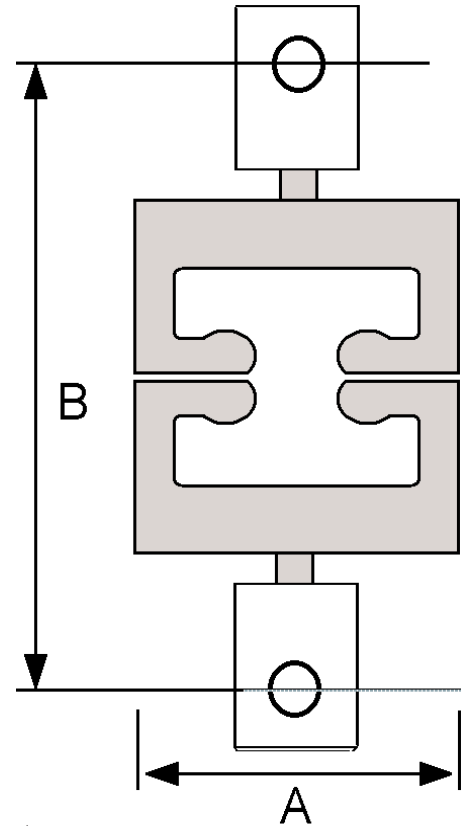
- Requires flexible coupling.

Other Wood Testing Fixtures Available

| Catalog Number | Description |
|----------------|--|
| 2820-060 | Shear (parallel to grain) |
| 2820-003 | Cleavage (MONNIN) |
| 2820-004 | Hardness |
| 2820-005 | Nail or screw withdrawal |
| 2820-006 | Adhesive bond (tensile) |
| 2820-007 | Tensile (parallel to grain) |
| 2820-008 | Tensile (perpendicular to grain) |
| 2820-009 | Compression (parallel to grain) |
| 2820-010 | Compression (perpendicular to grain) |
| 2820-011 | Tensile (perpendicular, for chipboard etc) |
| 2820-012 | Static bend |

Notes:

- Custom-designed fixtures for testing wood and timber products are also available.
If the above fixtures do not meet your requirements then please contact us.



▲ 2820-008 tension grips - perpendicular to grain



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