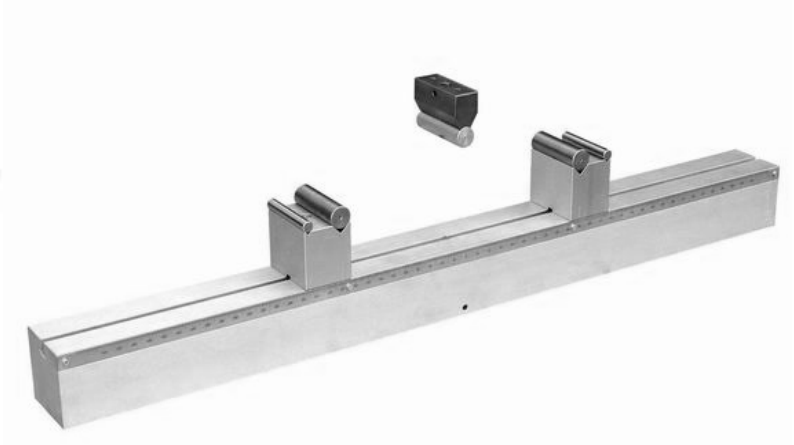
METROTEC

FIXTURES AND TOOLS FOR MECHANICAL TESTING ON WOOD AND DERIVATIVES



These fixtures and tools are designed to perform tests of resistance to breakage by **tensile, bending, compression, shear, hardness, friction**... of **wood, chipboards, plywood boards**... samples, being incorporated in a Universal Testing Machine

TECHLABSYSTEMS

APPLICABLE STANDARDS

(DIN UNE EN 310 - 311 - 314 - 319 – 320 – 408 – 789) - UNE 56543 – ISO 6238 – ISO 13061-3 - **DIN 52367 – ASTM D1037 – ASTM D143 - UNE EN 13354 – UNE 56543...**

INFORMATION

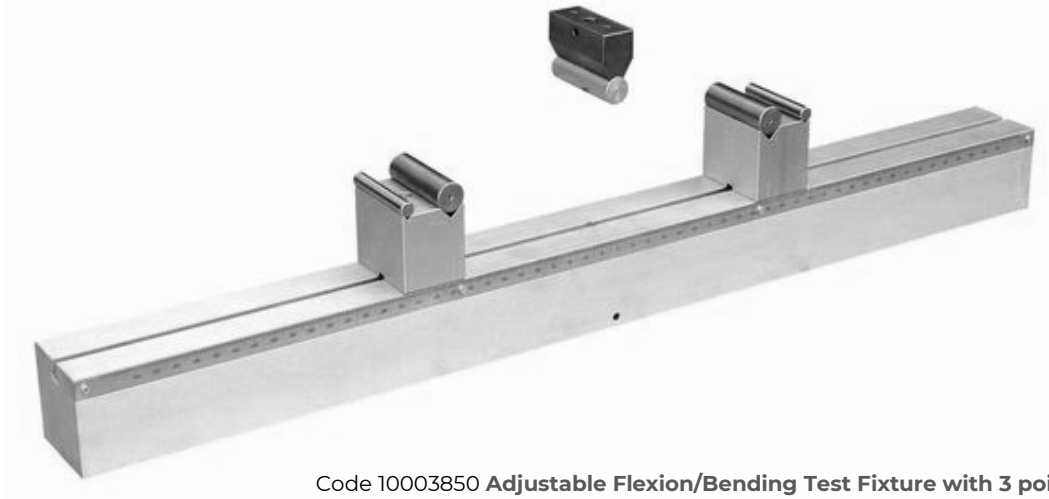
These fixtures placed in a Universal Testing Machine of the force capacity required by the tests and types of wood to be tested, allow to evaluate the physical-mechanical properties of standardized samples of wood, chipboards, plywood boards, and its derivatives, such as resistance to compression, tensión, 3 and 4 point bending, shear stress, hardness...

1.- COMPRESSION

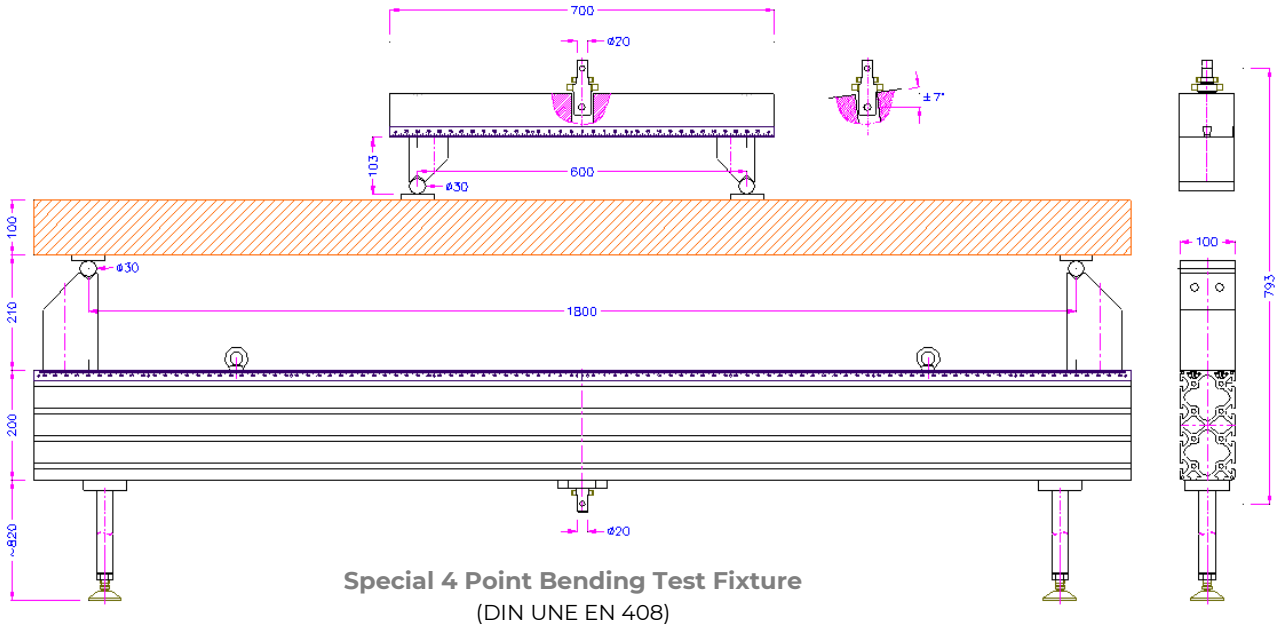
Platos Compresión Circulares
56 mm a 300 mm Ø

Code 10003855 **Compression Test Plates**
(300 x 300 mm and 50 kN capacity)
(DIN EN UNE 310)

2.- BENDING/FLEXURE



Code 10003850 **Adjustable Flexion/Bending Test Fixture with 3 points of support** (Max Distance Supports 1100 mm and Width supports 100 mm)
(DIN EN UNE 310)



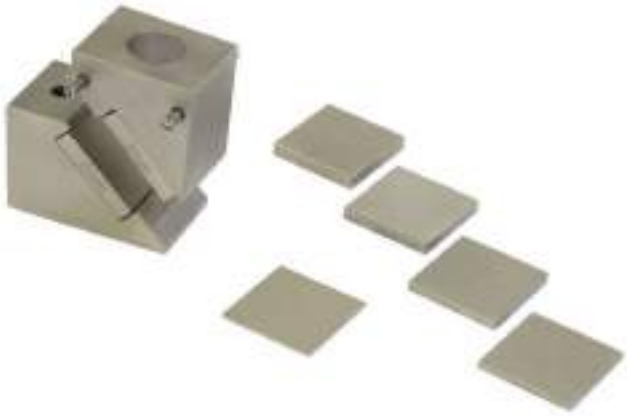
Special 4 Point Bending Test Fixture
(DIN UNE EN 408)

Special bend test fixture to test furniture connectors
(DIN 68501)

3.- CUT / SHEAR

Code 10003852 - **Shear Force Testing Fixture DE-55**
(UNE 56543 – ISO 6238 – DIN 52367)

45° Compression Shear Test Fixture
(ASTM-D1037-Fig.31)



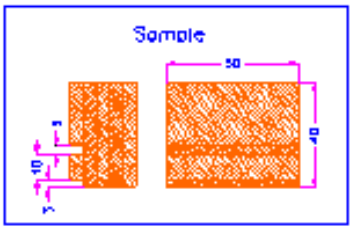
Carriers and insert plates for 45° compression-shear test fixture
to accommodate samples of multiple thicknesses.
Carriers have magnets to attach insert plates
(ASTM-D1037-Fig.31

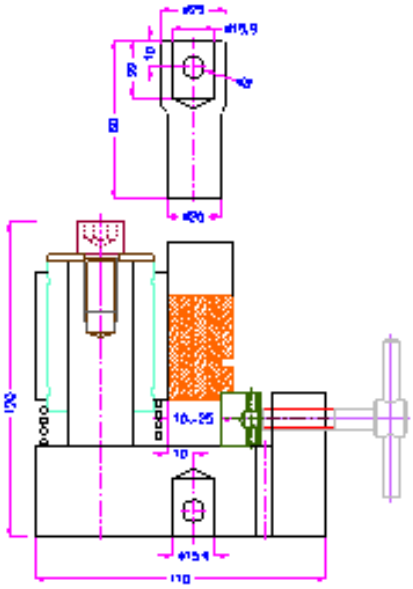
Arcane Test
Measurement of the shear properties of clear wood

Shear Test Fixture
Shear strength of adhesive bonds between rigid substrates by the Block-Shear method
(ASTM D4501)

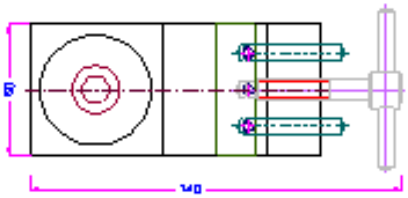
Shear test on wood
Tensile force 20 kN
Clamping force: 80 kN at 160 Nm torque
Max. jaw opening: 50mm
Steel, nickel-plated

Shear test fixture to test bonding quality of plywood
(DIN UNE EN 314-1)





Code. 10003853 **Shear Fixture Test DE-60**
(UNE EN 13354)



Fixture to test the tooth strength of wood laminate click systems

For laminate samples 0-20 mm thick
Aluminum, anodized
Stainless steel platen 100x200x5 mm

4.- HARDNESS

Wood hardness testing fixture
(radial and tangential shrinkage) in
small samples wood spans
Upper part
Lower compression plate needed for testing
(ASTM D143, Figure 17)

5.- FRICTION

Friction test fixture for wood laminate
The sample is gripped by 3 mechanical grips
Rubber-coated insert jaws, opening 0-36 mm,
clamping surface 100x30 mm

6.- TENSION / EXTRACTION SCREWS-NAILS

Code 10003848 - **Tensile Test Fixture Perpendicular to the faces MT-35**
50 x 50 mm
(DIN EN UNE 319)

Pull-Out Strength Test Device for Wood Joints/Fasteners

Tensile Testing Fixtures Perpendicular to the faces
- Special customized manufactures -

Fixture for testing parallel traction to the fiber of wood samples.
(ASTM-D143-Fig.29)

Code 10003849 **Nail and Screw Removal Fixture DE-65**
(ASTM D 1037...)

Fixture to test resistance to axial withdrawal of screws for wooden samples
Maximom load 20 kN
(DIN UNE EN 320)

Code 10003856 - **Fixture to test surface soundness of wood-based panelsDE-50**
Maximum load: 5 kN
(DIN EN UNE 311)

Special fixture to test withdrawal resistance of #12 screws from wood panels
Maximum load 25 kN
(ASTM-D1037-Fig.13 (§16)

Special fixture to test withdrawal resistance of nails from wood panels
(ASTM-D1037-Fig. 13 (§§13-15))

Includes::
- lower holder
- quick-action chuck drill
- Max. load 1kN

Recommended Testing Machines:

MTE-5 (to 5 kN)

MTE-50 (to 50 kN)

MTE-200 (to 200 kN)