

WOOD TESTING MACHINE

MODEL No. EM – AC/SS/TL/B – 10 TO 200

WOOD | COMPOSITE MATERIAL

Measuring and analysing the properties of wood and wood-based products typically involves bend and flexure testing, but standard tension and compression tests are occasionally performed depending on the product being tested and the nature of its final use. EQVIMECH has wood testing equipment including a wide range of grips, fixtures, and test frames capable of withstanding not only the forces encountered when testing wood products but also the environment where the testing is performed. In addition, EQVIMECH has the capability to fabricate custom made fixtures and test jigs which are common when testing wood-based products.

To identify the properties of wood-base fibre and particle panel materials. The properties range from size and appearance, to tensile, compression, and shear strengths, as well as hardness, water absorption, and fastener holding.

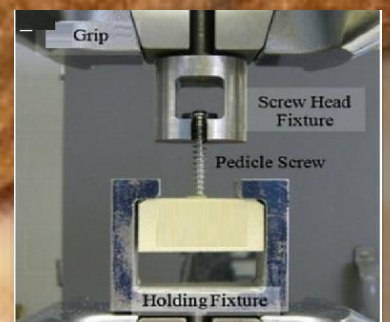
Tested fasteners include nails, staples, screws, bolts, and plate connectors. Grips and fixtures for these tests can be a bit unique depending on the configuration of the test specimens.

As per various testing standard designed to measure the flexural stiffness and strength properties of polymer matrix composites.



Calculations: (LED Display / Software interface)

- Max Load
- Load vs. Displacement Data/Curves
- Modulus of Rupture
- Apparent Modulus of Elasticity
- Stress vs Strain
- Cyclic Loading
- Various Others



Recommended Equipment

Testing Equipment	• Model No. EM – AC/SS/TL/B – 10 to 200
Testing Standards	• ASTM D1037
	• ASTM D198
	• ASTM D1761
	• ASTM D7264

Technical Specification:

Capacity	10 kN to 200 kN
Load cells available	1kN to 200kN (100kg – 20000kg)
Maximum crosshead travel	1000 mm
Testing speed range	0.1 to 500 mm/min
Maximum crosshead speed at 10 kN	500 mm/min
Jog speed	0. 1 to 500 mm/min
Return speed	0.1 to 500 mm/min
Frame stiffness	10kN/mm to 200kN/mm (as per model)
Dimensions (H × W × D)	1800 mm × 11000 mm × 450 mm
Weight (approx.)	400 - 800 kg (as per model)
Display	Graphical with test data output through inbuilt software
Power	220 V, Single phase , 50 Hz
Accuracy	± 0.5 % at 2 to 100 % Full Load
Standard Speed	0.5-500mm/min *Optional through computer software
Grip to Grip Suspension	Min 25 mm and Max.900 mm (applicable only with vice type standard grip)
Digital Load Suspension	LCD Display
Drive Mechanism	Variable Frequency Drive
Safety	Yes
Grippers	Vice Type (Screw Side Action Tensile Grips) Flexural Wedge Type Roller Type Pneumatic 3 – Point Bending Test
Communication Converter	RS 232
Material	Beams, Composite Wood Products Cross laminated Densified wood Engineered wood Fiberboard Laminated strand, Laminated timber Laminated veneer Oriented strand board Parallel strand, Particle board Plywood, Wood products
Finish	Power coated / Zinc plating for corrosion resistant finish

