

Three- and Four-Point Flexure Fixture for Composites

Built to ISO 14125 — Fibre-reinforced plastic composites — Determination of flexural properties



OVERVIEW

Adjustable three- and four-point bend fixture for flexural testing of fibre-reinforced plastic composites. Support and loading anvils slide along scaled bases to set the span, and interchangeable rollers of different radii are pinned into the anvils, giving accurate geometry for both ISO 14125 methods.

KEY FEATURES

- Supports and loading anvils slide on scaled rails for fast span setting
- Three-point and four-point loading members in one system
- Interchangeable pinned rollers in different radii per ISO 14125 geometry
- Hardened, ground rollers for repeatable contact and long life
- Supplied with adapters to suit your load frame (clevis or threaded)

TECHNICAL SPECIFICATIONS

Test method	Three-point (Method A) and four-point (Method B) flexure
Test type / loading	Quasi-static bending
Specimens	Flat composite bars sized per ISO 14125 material class
Load capacity	10 kN standard; higher capacities on request
Fixture material	Stainless steel, hardened tool-steel rollers
Loading members	Pinned interchangeable rollers; radii per ISO 14125
Span adjustment	Sliding anvils on scaled rails
Machine connection	Clevis pin or threaded adapter, to suit customer frame

APPLICATIONS

- Carbon and glass fibre laminates
- Aerospace and automotive composites
- Wind-energy and marine laminates
- Material qualification and design allowables

ABOUT THE STANDARD

ISO 14125 specifies methods for determining the flexural properties of fibre-reinforced plastic composites under three-point (Method A) and four-point (Method B) loading. Spans and specimen sizes depend on the material class. Results include flexural strength, flexural modulus and flexural strain at failure, used for material qualification and design data.

Ordering & customization: Specify loading method, span range, specimen width and thickness, roller radii, 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-ISO14125-BF