STANDARDS TEST FIXTURE

Mixed-Mode Bend Fixture

Mixed-mode I/II interlaminar fracture toughness fixture for composites to ASTM D6671



OVERVIEW

Mixed-mode bend test fixture for measuring mixed mode I/mode II interlaminar fracture toughness of unidirectional fiber-reinforced polymer matrix composites according to ASTM D6671. A lever arm loads a pre-cracked specimen through bonded end blocks, combining opening and shear at the crack tip. Nickel-plated steel and anodized aluminum, rated for 10 kN.

KEY FEATURES

- Designed for mixed-mode fracture toughness tests to ASTM D6671
- Lever loading combines mode I opening and mode II shear
- Steel and anodized aluminum construction, 5.56 kg
- Rated for loads up to 10 kN
- Aluminum end blocks available in packs of 5 to 50 pairs
- Piano hinges for specimen loading available on request

TECHNICAL SPECIFICATIONS

Max. load	10 kN
Test type	Mixed-mode I/II interlaminar fracture
Standard	ASTM D6671
Coupling	Female clevis, Ø 15.9 mm (5/8 in) pin; others on request
Material	Steel, nickel-plated; aluminum, anodized
Temperature range	0 … +70 °C; other ranges on request
Weight	5.56 kg
Scope of supply	1 fixture; end blocks ordered separately

AVAILABLE VERSIONS

Fixture	Mixed-mode bend fixture, without end blocks
End blocks, 5 pairs	Aluminum, untreated
End blocks, 10 pairs	Aluminum, untreated
End blocks, 25 pairs	Aluminum, untreated
End blocks, 50 pairs	Aluminum, untreated

APPLICATIONS

- Aerospace composite qualification
- Delamination resistance research
- Unidirectional prepreg testing
- Wind blade materials

STANDARDS ASTM D6671

Ordering & customization: Specify the machine coupling and the number of end block pairs required; piano hinges on request.

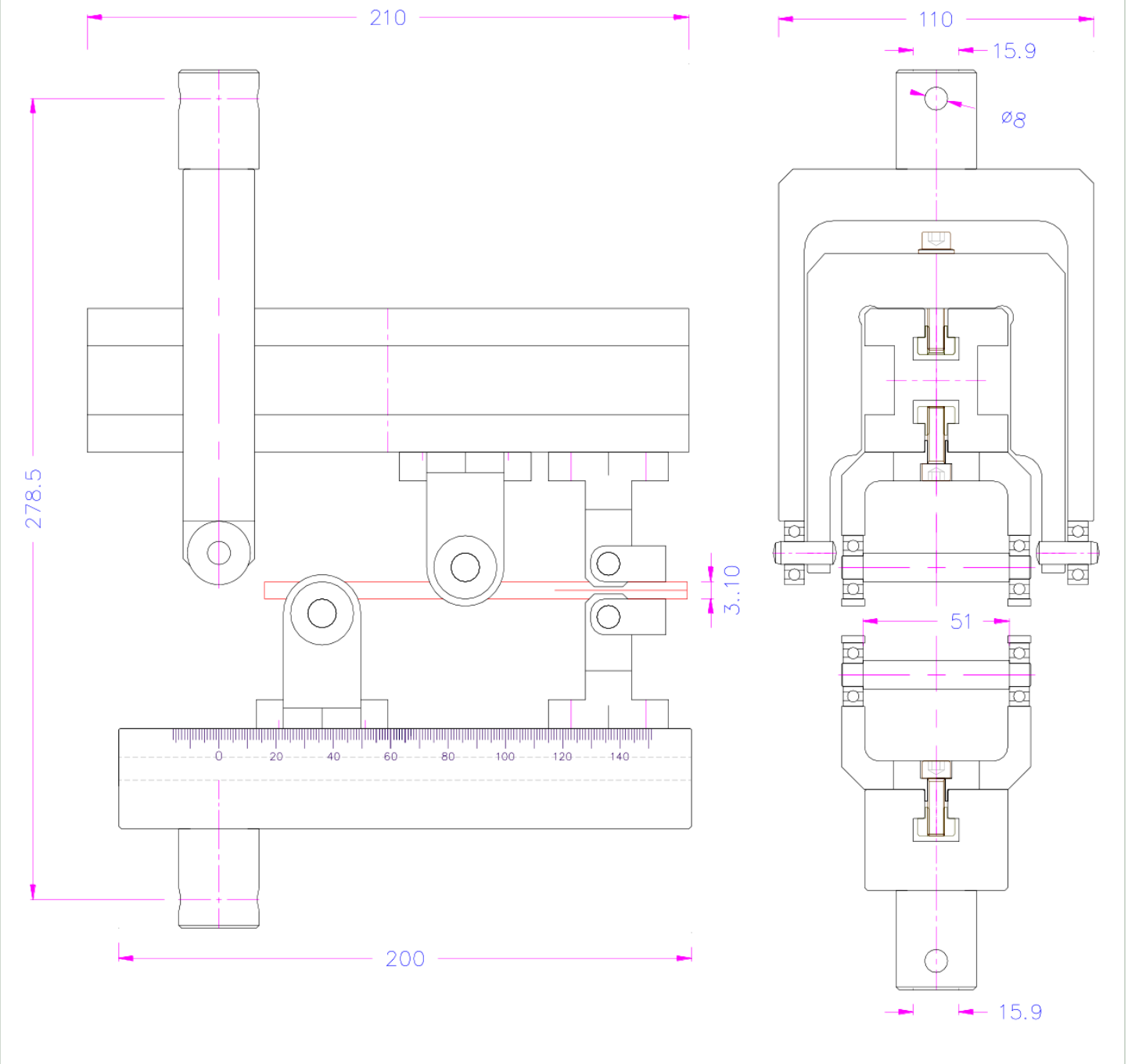
Dimensional drawings
See page 2. Certified drawings and 3D models available on request.

Specifications are typical and may vary by configuration; confirm at time of quote. Custom versions, couplings and adapters available on request. Part ref. UGC-ST-240

Mixed-Mode Bend Fixture

DIMENSIONAL DRAWINGS

FIG. 1



Dimensions in mm. Drawings are representative of the product family and may show optional versions or accessories; dimensions are for reference only and may change without notice. Certified dimensional drawings and 3D models are available on request.