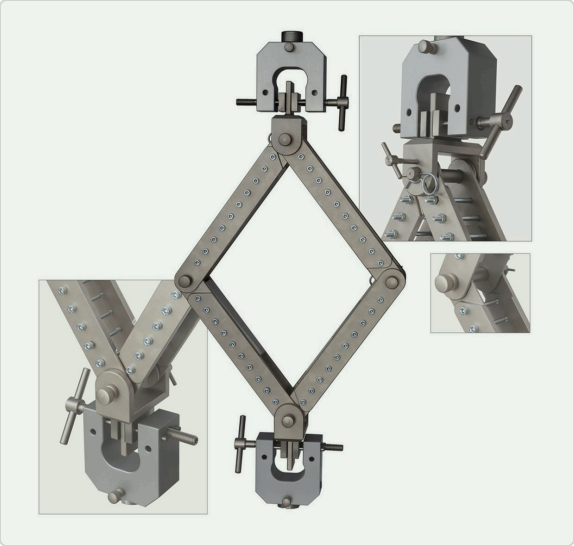
STANDARDS TEST FIXTURE

Picture Frame Shear Fixture

Picture frame shear fixture for composite face sheets and elastomeric sheets to ASTM D8067 and ISO 20337



OVERVIEW

Picture frame shear test fixture for in-plane shear testing. A square specimen is clamped in a hinged frame; pulling diagonal corners apart turns the frame into a rhombus and loads the specimen in pure shear. Versions cover composite face sheets of sandwich panels to ASTM D8067 Procedure C, fiber-reinforced plastics to ISO 20337, and thin silicone, rubber and elastic fabrics.

KEY FEATURES

- Hinged frame creates uniform in-plane shear in the specimen
- Versions for ASTM D8067 Procedure C and ISO 20337
- Light version for silicone, rubber and elastic fabrics
- Light version usable up to 280 °C
- Pyramid or wave jaws, clamping width up to 180 mm
- Nickel-plated steel construction, up to 50 kN

TECHNICAL SPECIFICATIONS

Max. load	500 N, 10 kN or 50 kN (see variants)
Test type	In-plane shear
Standards	ASTM D8067 Procedure C, ISO 20337
Clamping width	Max. 180 mm (light version)
Specimen thickness	Max. 1 mm (light version)
Frame side spacing	250 mm (light version)
Coupling	Male clevis, Ø 12 mm upper / Ø 31.7 mm lower pin holes (light version)
Material	Steel, nickel-plated
Temperature range	Up to 280 °C (light version)

AVAILABLE VERSIONS

ASTM D8067 Procedure C	10 kN, composite face sheets of sandwich panels
ISO 20337	50 kN, fiber-reinforced plastic composites
Light version	500 N, pull at 30°, for silicone, rubber, elastic fabrics
Pyramid jaws	Serrated, max. sample width 180 mm
Wave jaws	Max. sample width 180 mm

APPLICATIONS

- Aerospace sandwich panels
- Composite shear modulus testing
- Elastomer and silicone sheets
- Technical textiles

STANDARDS ASTM D8067, ISO 20337

Ordering & customization: Specify the standard, specimen size and thickness, required capacity and the machine coupling.

Drawings available on request
Contact us for dimensional drawings or 3D models of this product.

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-510