STANDARDS TEST FIXTURE

Composite Laminate Compression Fixture

Open-hole and bearing compression fixture for composite laminates to ASTM D6484, D7615 and D6742



OVERVIEW

Compression test fixture for polymer matrix composite laminates according to ASTM D6484, ASTM D7615 and ASTM D6742. The specimen is supported along its faces by diamond-coated clamping surfaces to prevent buckling, and loaded either through hydraulic wedge grips (Procedure A) or between compression platens (Procedure B). Rated for 100 kN.

KEY FEATURES

- Covers open-hole compression to ASTM D6484, D7615 and D6742
- Supports Procedure A grip loading and Procedure B end loading
- Clamping surfaces coated with synthetic diamond for slip-free support
- Hardened, nickel-plated steel construction for long service life
- Rated for loads up to 100 kN
- Versions for bearing tests to ASTM D5961 and D7248

TECHNICAL SPECIFICATIONS

Max. load	100 kN
Test type	Compression (open-hole, bearing)
Specimen size	36 × 300 mm standard
Clamping surface	Synthetic diamond coating
Loading	Hydraulic wedge grips or compression platens
Material	Steel, hardened, nickel-plated
Temperature range	0 … +70 °C; other ranges on request
Scope of supply	1 fixture; platens or grips ordered separately

AVAILABLE VERSIONS

36 × 300 mm	ASTM D6484, D7615, D6742
38.1 × 304.8 mm (1.5 × 12 in)	Customized version for ASTM D6484
36 × 135 mm	ASTM D5961 Procedure B, Fig. 5 and 6
36 × 210 mm	ASTM D5961 Procedure B, Fig. 7 and 8; ASTM D7248 Method B

APPLICATIONS

- Aerospace composite allowables
- Open-hole compression testing
- Bolted joint bearing tests
- Carbon fiber laminate QC

STANDARDS ASTM D6484, ASTM D7615, ASTM D6742, ASTM D5961, ASTM D7248

Ordering & customization: Specify specimen size and test standard, and whether compression platens or hydraulic grips are required.

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-260

Composite Laminate Compression Fixture

DIMENSIONAL DRAWINGS

FIG. 1

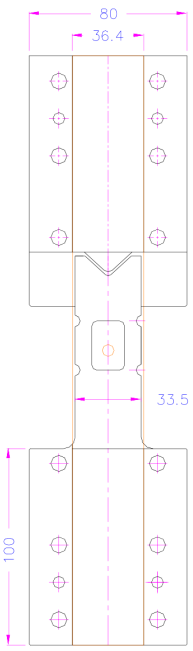


FIG. 2

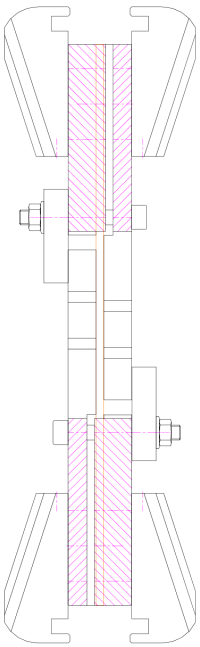


FIG. 3

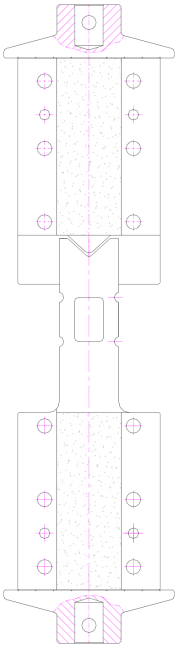
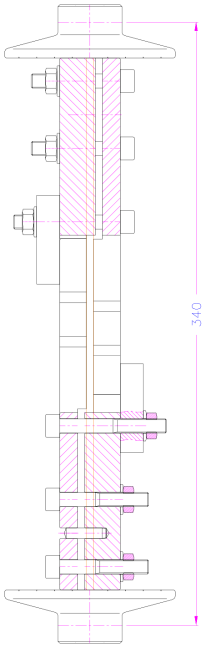


FIG. 4



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.