STANDARDS TEST FIXTURE

Fiberglass Pipe Tensile Fixture

Tensile fixtures for longitudinal properties of fiberglass pipe and tube to ASTM D2105



OVERVIEW

Special fixtures for determining the longitudinal tensile properties of fiberglass (glass-fiber-reinforced thermosetting-resin) pipe and tube according to ASTM D2105. The pipe ends are mounted on hardened steel carriers and inserts matched to the pipe diameter, so load is introduced without crushing the tube wall. Versions rated from 50 to 85 kN, including cryogenic use down to -196 °C.

KEY FEATURES

- Built for ASTM D2105 longitudinal tensile tests
- Inserts matched to pipe inner and outer diameters
- Hardened, nickel-plated steel construction for high loads
- Versions rated 50 kN, 55 kN and 85 kN
- Cryogenic version for -196 to +15 °C
- Couplings from Ø 31.8 mm to Ø 50 mm

TECHNICAL SPECIFICATIONS

Max. load	50–85 kN depending on version
Test type	Longitudinal tension, pipe and tube
Pipe size	Matched per order; e.g. ID 38–54 mm, ID 78.4 / OD 81.6 mm
Material	Steel, hardened, nickel-plated
Coupling	Female clevis Ø 31.8 mm (1-1/4 in), Ø 40 mm or Ø 50 mm; others on request
Temperature range	0 to +70 °C; cryogenic version -196 to +15 °C
Operation	Manual mounting of pipe ends on inserts

AVAILABLE VERSIONS

50 kN version	Hardened steel, female clevis Ø 40 mm
55 kN version	For tube ID 78.4 mm / OD 81.6 mm, female clevis Ø 31.8 mm, 0 to +70 °C
85 kN cryogenic version	Carrier with 2 inserts for ID 38–54 and 43–50 mm, -196 to +15 °C, female clevis Ø 31.8 mm
Heavy coupling version	Female clevis Ø 50 mm with 25 mm pin
Threaded version	Male thread M42 × 2 coupling

APPLICATIONS

- Fiberglass pipe and tube
- GRP pressure pipe qualification
- Composite tubing R&D
- Cryogenic composite components

STANDARDS ASTM D2105

Ordering & customization: Specify pipe inner and outer diameter, maximum load, test temperature and 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-710