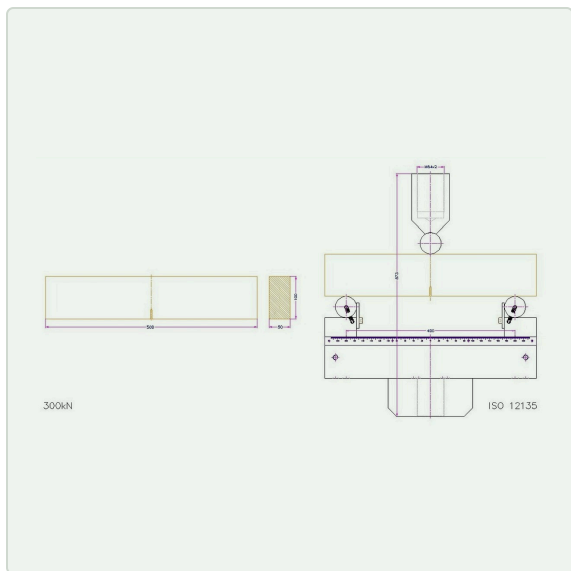


Fracture Toughness Bend Fixture (SENB)

Built to ISO 12135 — Metallic materials — Unified method of test for the determination of quasistatic fracture toughness



OVERVIEW

Heavy-duty three-point bend fixture for fracture toughness testing of single-edge notched bend specimens. Support rollers held against stops by springs sit on a graduated base beam set to four times the specimen width, and a central roller loads the fatigue-precracked specimen.

KEY FEATURES

- Spring-retained support rollers free to roll, limiting friction effects
- Graduated base beam for accurate span setting
- Shown with 400 mm span for 100 mm wide SENB specimens
- Rated 300 kN per drawing; M64×2 machine thread
- Supplied with adapters to suit your load frame (clevis or threaded)

TECHNICAL SPECIFICATIONS

Test method	Quasistatic fracture toughness (K, J, CTOD), ISO 12135
Test type / loading	Three-point bending of SENB specimens
Specimens	Fatigue-precracked SENB, e.g. 500 × 100 × 50 mm
Load capacity	300 kN; other capacities on request
Fixture material	High-strength steel base, hardened rollers
Loading members	Hardened cylindrical loading and support rollers
Machine connection	M64×2 thread or adapter, to suit customer frame
Compatible frames	Electromechanical and servo-hydraulic universal test machines

APPLICATIONS

- Structural and pressure-vessel steels
- Weld and heat-affected zone qualification
- Aluminium and titanium alloys
- Fracture mechanics research

ABOUT THE STANDARD

ISO 12135 gives a unified method for determining the quasistatic fracture toughness of homogeneous metallic materials, using fatigue-precracked single-edge bend or compact specimens. Results are expressed as K, J or CTOD, and resistance curves can also be determined, supporting structural integrity assessment and material qualification.

Ordering & customization: Specify specimen width and thickness, span, load capacity, clip gauge requirements and test 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-ISO12135-BF