ASTM B565 Shear Fixture

Double Shear Fixture for Aluminum Rivets and Wire

Built to ASTM B565 — Standard Test Method for Shear Testing of Aluminum and Aluminum-Alloy Rivets and Cold-Heading Wire and Rods



OVERVIEW

Double shear fixture for aluminum rivets, cold-heading wire and rod per ASTM B565. The round specimen passes through close-fitting hardened bushings and a center blade shears it across two planes at once, giving the ultimate shear strength of the material.

KEY FEATURES

- Hardened, close-fitting shear bushings give clean double-shear failure
- Interchangeable bushings for a range of wire and rivet diameters
- Guided center blade keeps the shear planes square
- Easy removal of sheared pieces between tests
- Supplied with adapters to suit your load frame (clevis or threaded)

TECHNICAL SPECIFICATIONS

Test method	Double shear per ASTM B565
Test type / loading	Double shear, compression or tension loading
Specimens	Round wire, rod or rivet stock
Load capacity	50 kN standard; higher capacities on request
Fixture material	Hardened tool steel
Shearing surfaces	Hardened, ground bushings and blade
Machine connection	Clevis pin or threaded adapter, to suit customer frame
Compatible frames	Electromechanical and servo-hydraulic universal test machines

APPLICATIONS

- Aluminum rivets and fasteners
- Cold-heading wire and rod
- Aerospace fastener stock acceptance
- Wire mill quality control

ABOUT THE STANDARD

ASTM B565 determines the shear strength of aluminum and aluminum-alloy rivets and cold-heading wire and rod. A round specimen is loaded in double shear in a fixture with hardened, close-fitting shearing edges, and shear strength is calculated from the maximum force and the total sheared area.

Ordering & customization: Specify specimen diameters, required capacity 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-B565-SF