

Double Shear Fixture for Aluminum Alloys

Built to ASTM B769 — Standard Test Method for Shear Testing of Aluminum Alloys



OVERVIEW

Double shear fixture for determining the shear strength of aluminum alloy products per ASTM B769. The specimen is seated in hardened outer dies and loaded by a center blade, shearing it on two planes simultaneously to give the ultimate shear strength.

KEY FEATURES

- Hardened outer dies and center blade with tight shearing clearances
- Interchangeable inserts for the specimen sizes used
- Guided blade maintains parallel, square shear planes
- Rigid frame minimizes deflection under load
- Supplied with adapters to suit your load frame (clevis or threaded)

TECHNICAL SPECIFICATIONS

Test method	Double shear per ASTM B769
Test type / loading	Double shear via center blade
Specimens	Machined specimens per ASTM B769 geometry
Load capacity	50 kN standard; higher capacities on request
Fixture material	Hardened tool steel
Shearing surfaces	Hardened, ground dies and blade
Machine connection	Clevis pin or threaded adapter, to suit customer frame
Compatible frames	Electromechanical and servo-hydraulic universal test machines

APPLICATIONS

- Wrought aluminum alloy products
- Castings and forgings
- Joint and fastener design data
- Material acceptance testing

ABOUT THE STANDARD

ASTM B769 covers double shear testing of aluminum alloy products, including specimens machined from wrought and cast products. Shear strength is calculated from the maximum force and the area of the two shear planes, providing data for design of pinned and riveted joints and for material comparison.

Ordering & customization: Specify specimen dimensions, 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.
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