

Punch Shear Tool for Plastics

Built to ASTM D732 — Standard Test Method for Shear Strength of Plastics by Punch Tool



OVERVIEW

Punch-type shear tool for determining the shear strength of plastic sheet per ASTM D732. The specimen is clamped between a die block and a clamping plate, and a cylindrical punch is forced through it, shearing a disk from the sheet. Maximum load and sheared area give shear strength.

KEY FEATURES

- Hardened, precision-ground punch and die for clean shear
- Clamping plate secures specimen and prevents dishing
- Close punch-die clearance for consistent shear zone
- Compact tool loaded in compression between platens
- Replaceable punch and die components

TECHNICAL SPECIFICATIONS

Test method	Punch shear
Test type / loading	Compression of punch through clamped specimen
Specimens	Flat sheet specimens with center hole per ASTM D732
Load capacity	50 kN standard; higher capacities on request
Fixture material	Hardened tool steel
Shearing members	Precision-ground punch and die
Machine connection	Loaded by compression platens, or threaded adapters
Compatible frames	Electromechanical and servo-hydraulic universal test machines

APPLICATIONS

- Plastic sheet and molded parts
- Laminates and composite sheet
- Material property data
- Plastics QC labs

ABOUT THE STANDARD

ASTM D732 determines the shear strength of plastics in sheet and molded form using a punch-type shear fixture. A flat specimen with a central hole is clamped and a punch is driven through it in compression, producing shear around the punch circumference. Shear strength is the maximum load divided by the sheared area.

Ordering & customization: Specify specimen thickness range, required capacity and test machine connection.

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-D732-SF