

ASTM D1822 Specimen Cutter

Tensile-Impact Specimen Cutting Die for Plastics

Built to ASTM D1822 — Standard Test Method for Tensile-Impact Energy to Break Plastics and Electrical Insulating Materials



OVERVIEW

Precision cutting die for preparing tensile-impact specimens from plastic sheet and film. The hardened, sharpened cutting edge reproduces the short dog-bone specimen profiles used in ASTM D1822, giving clean, burr-free edges and consistent dimensions so that impact energy results reflect the material rather than specimen preparation.

KEY FEATURES

- Hardened tool-steel cutting edge reproduces the specified specimen profile
- Clean, burr-free edges minimize premature edge-initiated failures
- Use with arbor, hydraulic or pneumatic clicker presses
- Available for S-type and L-type specimen geometries
- Resharpenable edge for long service life

TECHNICAL SPECIFICATIONS

Test method	Tensile-impact energy to break (specimen preparation)
Product type	Specimen cutting die
Specimens	S-type or L-type tensile-impact specimens per ASTM D1822
Material thickness	Sheet and film up to approx. 4 mm; confirm for your material
Die material	Hardened tool steel
Cutting edge	Precision-ground, resharpenable
Press compatibility	Arbor, hydraulic or pneumatic specimen cutting presses
Options	Ejector, handle or press-mount configurations on request

APPLICATIONS

- Plastic sheet and film
- Electrical insulating materials
- Elastomeric and flexible polymers
- QC specimen preparation

ABOUT THE STANDARD

ASTM D1822 measures the energy required to break plastics and electrical insulating materials under high-speed tensile loading. A pendulum strikes a crosshead attached to one end of a small dog-bone specimen, rupturing it in tension. The method suits materials too flexible or thin for conventional pendulum impact tests and uses defined S-type and L-type specimen geometries.

Ordering & customization: Specify specimen type (S or L), material thickness and the press the die will be used in 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-D1822-SC