

HARDENED STEEL CUTTING DIE

Hardened Steel Cutting Die for ISO 75-2

Rectangular Bar · Flexural / HDT specimen — built to ISO 75-2: Plastics — Determination of temperature of deflection under load — Part 2: Plastics and ebonite


OVERVIEW

Solid cutting die for cutting Rectangular Bar specimens to ISO 75-2. The die is machined from a single piece of steel, hardened and finished with a sharp, precision cutting edge, so it holds its profile when cutting harder plastics from 0 to 5 mm thick.

KEY FEATURES

- Machined from a single piece of steel — no joints or seams in the cutting edge
- Hardened, precision-finished edge for clean, square specimen sides
- Cuts harder plastics, filled compounds and sheet from 0–5 mm thick
- Integral ejector plate releases the specimen after cutting
- Long service life; cutting edge can be re-sharpened

SPECIMEN PROFILE

Length	80 ± 2 mm
Width	10.0 ± 0.2 mm
Thickness	4.0 ± 0.2 mm
Support span (flatwise)	64 mm
Orientation	Flatwise loading

Nominal values per ISO 75-2; die is cut to the standard's profile.

DIE SPECIFICATIONS

Die construction	One-piece machined steel body
Cutting edge	Hardened, precision-finished
Material thickness	0 – 5 mm
Recommended materials	Rigid & semi-rigid plastics, filled compounds, rubber, sheet & film
Specimen ejection	Integral ejector plate
Press compatibility	Manual, pneumatic & hydraulic sample-cutting presses
Cut profile	Rectangular Bar per ISO 75-2

APPLICATIONS

- Automotive under-hood parts
- Electrical housings
- Appliance components
- Engineering resin grading

ABOUT THE STANDARD

ISO 75-2 sets the conditions for measuring heat deflection temperature of plastics and ebonite under a defined flexural stress. The 80 × 10 × 4 mm bar is loaded flatwise in three-point bending while temperature is ramped until a set deflection is reached.

Ordering & customization: Specify the standard and specimen type, die style (ribbon steel or hardened steel), the material and thickness you cut, and your press make/model so we can match the mounting. Custom profiles, multi-cavity dies and nick/notch features are available on request.

Also available: Ribbon Steel version

Economical steel-rule die for rubber, elastomers and soft plastics up to 3 mm thick — same ISO 75-2 profile.

Specifications are typical and may vary by configuration; confirm at time of quote. Refer to the current edition of the standard for specimen tolerances and test procedures. Part ref. UGC-CDH-ISO752-MethodAB