

HARDENED STEEL CUTTING DIE

Hardened Steel Cutting Die for ISO 20753-A2

Multipurpose Dumbbell Type A2 · Tensile (multipurpose) specimen — built to ISO 20753: Plastics — Test specimens



OVERVIEW

Solid cutting die for cutting Multipurpose Dumbbell Type A2 specimens to ISO 20753. 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

Overall length (min)	150 mm
Width of ends	20.0 ± 0.2 mm
Length of narrow section	60.0 ± 0.5 mm
Width of narrow section	10.0 ± 0.2 mm
Transition radius (min)	60 mm
Thickness	4.0 ± 0.2 mm

Nominal values per ISO 20753; 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	Multipurpose Dumbbell Type A2 per ISO 20753

APPLICATIONS

- Injection-moulded parts
- Extruded sheet & profiles
- Resin qualification
- Filled & reinforced compounds

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.

ABOUT THE STANDARD

ISO 20753 defines the family of plastic test specimens (multipurpose, scaled and bar types) used across tensile, flexural and impact standards. Type A2 is the multipurpose dumbbell with a 60 mm narrow section, suited to machining or die-cutting from sheet.

Also available: Ribbon Steel version

Economical steel-rule die for rubber, elastomers and soft plastics up to 3 mm thick — same ISO 20753-A2 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.
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