

HARDENED STEEL CUTTING DIE

Hardened Steel Cutting Die for ISO 3167 Type A

Multipurpose Dumbbell Type A · Tensile (multipurpose) specimen — built to ISO 3167: Plastics — Multipurpose test specimens



OVERVIEW

Solid cutting die for cutting Multipurpose Dumbbell Type A specimens to ISO 3167. 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)	170 mm
Width of ends	20.0 ± 0.2 mm
Length of narrow section	80 ± 2 mm
Width of narrow section	10.0 ± 0.2 mm
Transition radius	20 to 25 mm
Thickness	4.0 ± 0.2 mm

Nominal values per ISO 3167; 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 A per ISO 3167

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 3167 defined moulded multipurpose dumbbells from which tensile, flexural, impact and HDT specimens can all be taken. Type A is the directly injection-moulded version with an 80 mm narrow section.

Also available: Ribbon Steel version

Economical steel-rule die for rubber, elastomers and soft plastics up to 3 mm thick — same ISO 3167 Type A 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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