

HARDENED STEEL CUTTING DIE

Hardened Steel Cutting Die for ISO 1798 Type 1

Foam Dumbbell Type 1 · Tensile specimen — built to ISO 1798: Flexible cellular polymeric materials — Determination of tensile strength and elongation at break



OVERVIEW

Solid cutting die for cutting Foam Dumbbell Type 1 specimens to ISO 1798. 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	152 mm
Width of ends	25 mm
Width of narrow section	13 mm
Length of narrow section	55 mm
Gauge length	50 mm
Thickness	10 to 15 mm

Nominal values per ISO 1798; 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	Foam Dumbbell Type 1 per ISO 1798

APPLICATIONS

- Furniture & bedding foam
- Automotive seating
- Packaging foam
- Sports & medical padding

ABOUT THE STANDARD

ISO 1798 determines tensile strength and elongation at break of flexible foams using die-cut dumbbells. Type 1 is the standard dumbbell for foam blocks and slabstock.

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 1798 Type 1 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-ISO1798-T1