

HARDENED STEEL CUTTING DIE

Hardened Steel Cutting Die for GOST 270 Type 1

Dumbbell Type I · Tensile specimen — built to GOST 270: Rubber - Method of determination of elastic and tensile stress-strain properties



OVERVIEW

Solid cutting die for cutting Dumbbell Type I specimens to GOST 270. 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)	115 mm
Width of ends	25.0 ± 1.0 mm
Width of narrow section	6.0 (+0.4) mm
Length of narrow section	33.0 ± 1.0 mm
Gauge length	25.0 ± 1.0 mm
Thickness	1.0 ± 0.2 or 2.0 ± 0.2 mm

Nominal values per GOST 270; 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	Dumbbell Type I per GOST 270

APPLICATIONS

- Vulcanized rubber compounds
- Seals and gaskets
- Hoses and belts
- Incoming QC of elastomer sheet

ABOUT THE STANDARD

Die-cut dumbbell (Type I) for measuring tensile strength, elongation at break and stress at given elongation of rubber. Dimensions other than thickness are fixed by the cutting die and are not re-measured after cutting.

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 GOST 270 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.
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