RIBBON STEEL CUTTING DIE

Ribbon Steel Cutting Die for GOST 270 Type 4

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

Representative ribbon steel die

OVERVIEW

Steel-rule style cutting die for cutting Dumbbell Type IV specimens to GOST 270. A precision-bent, hardened ribbon-steel rule is set into a laser-cut plywood base with a foam ejection pad, giving clean, repeatable cuts in rubber, elastomers and soft plastics from 0 to 3 mm thick.

KEY FEATURES

- Hardened ribbon-steel rule precision-bent to the GOST 270 Type 4 profile
- Laser-cut multi-ply plywood base holds the rule rigidly in position
- Foam ejection pad pushes the specimen free after every stroke
- Ideal for rubber, elastomers, TPE, foam and soft plastics 0–3 mm thick
- Economical, fast-turnaround option for routine QC and lab testing

SPECIMEN PROFILE

Overall length (min)	55 mm
Width of ends	9.0 ± 1.0 mm
Width of narrow section	2.0 ± 0.1 mm
Length of narrow section	12.5 ± 1.0 mm
Gauge length	10.0 ± 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	Ribbon-steel rule (steel-rule die) in plywood base
Cutting edge	Hardened steel rule, precision bent
Material thickness	0 – 3 mm
Recommended materials	Rubber, elastomers, TPE, foams, soft plastics & films
Specimen ejection	Closed-cell foam ejection pad
Press compatibility	Manual, pneumatic & hydraulic sample-cutting presses
Cut profile	Dumbbell Type IV 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 IV) 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: Hardened Steel version
Machined from one piece of hardened steel for harder plastics up to 5 mm thick — same GOST 270 Type 4 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-CDR-GOST270-T4