

HARDENED STEEL CUTTING DIE

Hardened Steel Cutting Die for DIN 53504 S2

Standard dumbbell S2 · Tensile specimen — built to DIN 53504: Testing of rubber - Determination of tensile strength, elongation and stress values



OVERVIEW

Solid cutting die for cutting Standard dumbbell S2 specimens to DIN 53504. 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)	75 mm
Width of ends	12.5 ± 1 mm
Width of narrow section	4.0 ± 0.1 mm
Length of narrow section	25 ± 1 mm
Gauge length	20 mm
Recommended thickness	2.0 ± 0.2 mm

Nominal values per DIN 53504; 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	Standard dumbbell S2 per DIN 53504

APPLICATIONS

- Rubber and TPE QC
- Seals, O-ring and gasket compounds
- Ageing tests before/after exposure
- Tensile strength, elongation and modulus

ABOUT THE STANDARD

S2 is the most widely used DIN 53504 dumbbell, equivalent to ISO 37 Type 2. Its compact size makes it suitable for moulded test sheets and parts with limited material.

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 DIN 53504 S2 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-DIN53504-S2