

HARDENED STEEL CUTTING DIE

Hardened Steel Cutting Die for NBR 15557 Fig. 3

Dumbbell 4 × 25 · Tensile specimen — built to NBR 15557: Inner tubes for tyres - Requirements and test methods



OVERVIEW

Solid cutting die for cutting Dumbbell 4 × 25 specimens to NBR 15557. 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 mm
Width of narrow section	4.0 mm
Length of narrow section	25 mm
Gauge length	20 mm

Nominal values per NBR 15557; 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 4 × 25 per NBR 15557

APPLICATIONS

- Tyre inner tubes
- Butyl and natural rubber compounds
- Homologation testing (Brazil)
- Incoming compound QC

ABOUT THE STANDARD

Smaller dumbbell for cases where the tube wall or sample area is too small for the 6 mm specimen. Geometry follows the ISO 37 Type 2 profile.

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 NBR 15557 Fig. 3 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-NBR15557-F3