

HARDENED STEEL CUTTING DIE

Hardened Steel Cutting Die for ASTM D624 Die B

Tab-End Crescent Tear Specimen (Nicked) · Tear specimen — built to ASTM D624: Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers



OVERVIEW

Solid cutting die for cutting Tab-End Crescent Tear (Nicked) specimens to ASTM D624. 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	110 mm
Width (tab ends)	25 mm
Nick depth	0.50 ± 0.08 mm
Recommended thickness	2.3–3.0 mm
Grip separation	approx. 56 mm

Nominal values per ASTM D624; 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	Tab-End Crescent Tear Specimen (Nicked) per ASTM D624

APPLICATIONS

- Gaskets & seals
- Molded rubber goods
- Footwear soles
- Conveyor & transmission belts

ABOUT THE STANDARD

ASTM D624 measures the force needed to initiate and propagate a tear in rubber and TPE sheet using several die geometries. Die B is a crescent-shaped specimen with tab ends and a razor nick in the inner concave edge, tearing from a controlled flaw.

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 ASTM D624 Die B 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-D624-B