

HARDENED STEEL CUTTING DIE

Hardened Steel Cutting Die for ASTM D1430

Double V-Notched ZST Strip · Zero-strength time (ZST) specimen — built to ASTM D1430: Standard Classification System for Polychlorotrifluoroethylene (PCTFE) Plastics



OVERVIEW

Solid cutting die for cutting Double V-Notched ZST Strip specimens to ASTM D1430. 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	50 mm
Width	4.8 mm
Thickness	1.6 mm
Notch form	Two opposed 90° V-notches at mid-length
Notch depth (each side)	approx. 1 mm

Nominal values per ASTM D1430; 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	Double V-Notched ZST Strip per ASTM D1430

APPLICATIONS

- Cryogenic seals & valve seats
- Pharmaceutical blister film
- Chemical-resistant components
- Aerospace fluoropolymer parts

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.

ABOUT THE STANDARD

ASTM D1430 classifies PCTFE molding and extrusion materials by properties including zero-strength time, a measure related to molecular weight. The small double-V-notched strip is held at elevated temperature under a light load and the time to break at the notches is recorded.

Also available: Ribbon Steel version

Economical steel-rule die for rubber, elastomers and soft plastics up to 3 mm thick — same ASTM D1430 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-D1430