

HARDENED STEEL CUTTING DIE

Hardened Steel Cutting Die for GOST 13518

Bent-strip ESCR specimen · Environmental stress cracking specimen — built to GOST 13518: Plastics - Method for determination of environmental stress-cracking resistance of polyethylene



OVERVIEW

Solid cutting die for cutting Bent-strip ESCR specimens to GOST 13518. 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

Length	38 mm
Width	13 mm
Thickness	~3 mm
Notch length	19.0 ± 0.5 mm
Notch depth	0.5 ± 0.05 mm

Nominal values per GOST 13518; 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	Bent-strip ESCR specimen per GOST 13518

APPLICATIONS

- PE pipe and fitting resins
- Blow-molded containers
- Cable jacketing compounds
- Resin lot acceptance

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

Notched strips are bent into a U and held in a brass channel immersed in a surfactant solution, and the time to cracking is recorded. It is the Russian counterpart of the bent-strip method.

Also available: Ribbon Steel version

Economical steel-rule die for rubber, elastomers and soft plastics up to 3 mm thick — same GOST 13518 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-GOST13518