

HARDENED STEEL CUTTING DIE

Hardened Steel Cutting Die for GOST R 57950

Rheometer disc · Oscillatory rheometry specimen — built to GOST R 57950: Plastics - Determination of dynamic mechanical properties - Part 10: Complex shear viscosity using a parallel-plate oscillatory rheometer



OVERVIEW

Solid cutting die for cutting Rheometer disc specimens to GOST R 57950. 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

Diameter	25 mm
Typical gap / thickness	1-2 mm
Angular frequency range	~0.01 to 100 rad/s

Nominal values per GOST R 57950; 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	Rheometer disc per GOST R 57950

APPLICATIONS

- Polymer melt flow characterization
- Resin batch comparison
- Processing window studies
- Recycled material evaluation

ABOUT THE STANDARD

Disc specimens are loaded between parallel plates and oscillated to measure complex shear viscosity and moduli of polymer melts. The 25 mm diameter matches the standard plate size.

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 GOST R 57950 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-GOSTR57950