

HARDENED STEEL CUTTING DIE

Hardened Steel Cutting Die for ISO 4589-2 Type 1, 2

Oxygen Index Bar · Oxygen index specimen — built to ISO 4589-2: Plastics — Determination of burning behaviour by oxygen index — Part 2: Ambient-temperature test



OVERVIEW

Solid cutting die for cutting Oxygen Index Bar specimens to ISO 4589-2. 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	80 to 150 mm
Width	10.0 ± 0.5 mm
Thickness (Type I)	4.0 ± 0.25 mm
Thickness (Type II)	10.0 ± 0.5 mm
Cutter length	150 mm

Nominal values per ISO 4589-2; die is cut to the standard's profile.

APPLICATIONS

- Wire & cable compounds
- Flame-retardant plastics
- Electrical enclosures
- Transport interior materials

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.

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-ISO45892-TITII

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	Oxygen Index Bar per ISO 4589-2

ABOUT THE STANDARD

ISO 4589-2 finds the minimum oxygen concentration in an O₂/N₂ mix that just supports flaming combustion of a vertically mounted specimen. Type I and II are self-supporting moulded bars, Type II being used for cellular materials.

Also available: Ribbon Steel version

Economical steel-rule die for rubber, elastomers and soft plastics up to 3 mm thick — same ISO 4589-2 Type 1, 2 profile.