

HARDENED STEEL CUTTING DIE

Hardened Steel Cutting Die for JIS K7161-2 1A

Tensile Dumbbell Type 1A · Tensile specimen — built to JIS K7161-2: Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics



OVERVIEW

Solid cutting die for cutting Tensile Dumbbell Type 1A specimens to JIS K7161-2. 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

Overall length	170 mm
Width of ends	20.0 ± 0.2 mm
Width of narrow section	10.0 ± 0.2 mm
Length of narrow section	80 ± 2 mm
Transition radius	24 ± 1 mm
Gauge length	75.0 ± 0.5 mm
Recommended thickness	4.0 ± 0.2 mm

Nominal values per JIS K7161-2; 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	Tensile Dumbbell Type 1A per JIS K7161-2

APPLICATIONS

- Molded plastic resin QC
- Material datasheet property generation
- Incoming resin lot acceptance
- Polymer R&D and compound comparison

ABOUT THE STANDARD

JIS K7161-2 sets tensile test conditions for molding and extrusion plastics. Type 1A is the preferred directly injection-molded specimen for modulus, yield and break properties.

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 JIS K7161-2 1A 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-JISK71612-T1A