

**HARDENED STEEL CUTTING DIE**

## Hardened Steel Cutting Die for JIS K6400-5 Fig. 2-1

Foam Tensile Dumbbell (Type 1) · Tensile specimen — built to JIS K6400-5: Flexible cellular polymeric materials — Physical properties — Part 5: Tensile strength and elongation at break



### OVERVIEW

Solid cutting die for cutting Foam Tensile Dumbbell (Type 1) specimens to JIS K6400-5. 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           | 152 mm     |
| Width of ends            | 25 mm      |
| Width of narrow section  | 13 mm      |
| Length of narrow section | 55 mm      |
| Gauge length             | 50 mm      |
| Thickness                | 10 – 15 mm |

Nominal values per JIS K6400-5; 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           | Foam Tensile Dumbbell (Type 1) per JIS K6400-5                      |

### APPLICATIONS

- Seating and mattress foam QC
- Automotive interior foam
- Packaging and cushioning foam
- Foam supplier qualification

### ABOUT THE STANDARD

JIS K6400-5 determines tensile strength and elongation at break of flexible cellular materials such as polyurethane foam. The larger Type 1 dumbbell is the standard specimen cut from foam slabs.

**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 K6400-5 Fig. 2-1 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-JISK64005-F21