

## Mechanical Pencils (0.5mm and 0.7mm)

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Design & Documentation



Photo: Alex P. Kok — CC BY-SA 4.0 — via Wikimedia Commons (Rotring\_600\_mechanical\_pencil\_0.5\_mm\_silver.jpg)

Mechanical pencils hold fine leads that never need sharpening, drawing precise consistent lines for technical sketches and dimensioning. The 0.5 mm lead suits fine detail; 0.7 mm is more forgiving for general drawing.

### Key Features

- Lead sizes 0.3, 0.5, 0.7, 0.9 mm
- Lead hardnesses HB, 2B
- Push-click and twist-advance mechanisms
- Erasers under the caps
- Grip zones for control

### Typical Uses in the Workshop

- Sketch and dimension technical drawings
- Draw precise construction lines
- Record design work and notes
- Produce clean portfolio line work

### Safe Operation

1. Advance the lead by small clicks
2. Draw with light, even pressure
3. Rotate the pencil for even lead wear
4. Use a finer lead for detail work
5. Refill with the matching lead size

### SAFETY NOTES

- Never press lead toward the eyes
- Dispose of broken lead tips safely
- Keep leads out of small children's mouths
- Store pencils with the point in
- Do not press so hard the lead snaps

#### Maintenance & Consumables

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- Refill leads as needed
- Clean the mechanism of dust
- Replace worn erasers
- Check the clutch holds the lead
- Keep spare lead tubes with the pencils

#### Specification & Buying Notes

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A class set of 0.5 mm mechanical pencils with HB lead covers most drawing. Quality clutches feed reliably; cheap pencils jam. Buy lead refills in bulk tubes.