

Straight and Profile Router Bits

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Drilling & Cutting Tools

Router bits are the cutters for the router: straight bits cut grooves and housings, profile bits (roundover, chamfer, ogee, core-box) shape decorative edges, and bearing-guided bits follow templates. A good set covers most joinery and moulding jobs in school projects.

Key Features

- Straight bits 6-25 mm diameter
- Roundover and chamfer profiles in sets
- Bearing-guided flush-trim and template bits
- 1/4 and 1/2 inch shanks
- Carbide-tipped for long edge life

Typical Uses in the Workshop

- Cut housings and grooves for joints
- Round and chamfer edges for safety and looks
- Trim laminate and veneer flush with bearings
- Follow templates for repeated shapes

Safe Operation

1. Fit the shank fully into the collet and tighten
2. Set the depth and speed for the bit size
3. Feed against the rotation at a steady rate
4. Use the bearing or guide to control the cut
5. Take multiple light passes on deep profiles

SAFETY NOTES

- Never run the router with a loose bit
- Keep hands off the table surface near the bit
- Use guards on router tables
- Inspect bits for cracks before use
- Wear eye and hearing protection

Maintenance & Consumables

- Clean resin off bits after use
- Store bits in cases with protective sleeves
- Sharpen carbide tips when dull
- Check bearings spin freely, replace when rough
- Keep the shank clean for good collet grip

Specification & Buying Notes

Buy carbide-tipped sets with the profiles the course uses: straight, roundover, chamfer and flush-trim. Quality bearings on template bits last far longer than cheap ones.