

Countersink Drill Bits

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

Countersink bits cut a conical recess around a drilled hole so that a countersunk screw or rivet sits flush with the surface. They come as single bits, sets of sizes, and combined drills with countersinks for one-step holes in wood and metal.

Key Features

- Angles of 90 or 82 degrees common
- Fluted cutter heads with pilots or without
- Sets from 6 to 20 mm countersink diameter
- Combined drill-and-countersink styles
- HSS for metal, carbide-tipped for abrasives

Typical Uses in the Workshop

- Sink screws flush in wood and MDF
- Prepare holes for countersunk machine screws
- Deburr drilled holes in metal sheet
- Create recesses for decorative rivets

Safe Operation

1. Drill the clearance hole to the screw size
2. Fit the countersink in a drill or driver
3. Countersink slowly until the head sits flush
4. Check the depth with the screw in place
5. Deburr both sides of sheet metal holes

SAFETY NOTES

- Keep fingers clear of the spinning bit
- Countersink with the work clamped
- Do not countersink too deep - it weakens the part
- Wear eye protection against chips
- Remove the bit from the chuck when done

Maintenance & Consumables

- Keep the cutter edges sharp
- Clean resin build-up from flutes
- Store in a labelled bit case
- Replace chipped or burnt-out bits
- Check sizes are marked on the shanks

Specification & Buying Notes

Buy a set of standard 90 degree countersinks plus a couple of combined drill-and-countersink bits for one-step holes. HSS suits school work on wood and mild metal.