

V-Carving Router Bits

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Consumables & Spares

V-carving bits have a V-shaped cutter with an angled tip that cuts shallow, elegant engraved letters and decorative lines whose width changes with depth. They are the standard bits for signs, plaques and engraved artwork on the CNC router.

Key Features

- Angles 30, 45, 60, 90 degrees common
- Flat or pointed tips
- Carbide tipped for long life
- Cut depth sets the line width
- Fit standard router collets

Typical Uses in the Workshop

- Engrave signs and plaques
- Carve decorative borders and corners
- Make inlaid V-groove designs
- Cut fine lettering with variable depth

Safe Operation

1. Set the V-bit in the collet securely
2. Calculate depth for the desired line width
3. Use V-carving toolpaths with the software
4. Run a test on scrap to verify depth
5. Keep the feed steady for even cuts

SAFETY NOTES

- The spinning V-bit is sharp - keep clear
- Wear hearing and eye protection
- Check the bit is seated before running
- Do not force the machine through deep cuts
- Secure the workpiece firmly

Maintenance & Consumables

- Clean resin from the bit flutes
- Check the tip for chips and wear
- Store bits in capped tubes
- Resharpen or replace dull bits
- Keep the collet clean for true fitting

Specification & Buying Notes

Buy carbide V-bits in 60 and 90 degree angles for lettering, plus 30/45 degrees for fine detail. Quality bits with a polished flute leave cleaner engravings and hold edges longer.