

V-Blocks and Clamps

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Measuring & Inspection



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V-blocks are hardened steel blocks with a V-groove that hold round bars and cylinders securely for marking out, drilling, measuring and inspection. Paired with clamps they grip shafts for accurate work at the bench and on the surface plate.

Key Features

- V angles of 90 degrees standard
- Sets of matched pairs for parallel support
- Hardened and ground to tight accuracy
- Clamp models with thumb screws or straps
- Sizes to suit shaft diameters from 3 to 80 mm

Typical Uses in the Workshop

- Support round stock for marking out
- Hold shafts for centre drilling and end work
- Measure roundness and diameter at the bench
- Set up cylinders for inspection and jig work

Safe Operation

1. Select V-blocks that cradle the shaft deeply
2. Mate the blocks as a matched pair
3. Clamp the shaft without distorting it
4. Check the work level with a DTI across the tops
5. Remove the clamps before lifting the shaft

SAFETY NOTES

- Blocks are heavy and sharp-edged - handle carefully
- Make sure the work cannot roll off the bench
- Clamp securely before drilling or sawing
- Keep V-blocks off the floor
- Store the pair together to keep the match

Maintenance & Consumables

- Wipe and lightly oil the surfaces after use
- Protect the V surfaces from chips and grit
- Check the pairs are still matched if dropped
- Store in a padded box or rack
- Re-grind only by specialists if damaged

Specification & Buying Notes

Buy a matched pair of quality V-blocks with clamp kits in the sizes the workshop commonly uses. A 90 degree set in 50 mm height suits most school shaft work.