Workshop Files and Chisels

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

Photo: David Adam Kess — CC BY-SA 4.0 — via Wikimedia Commons (Topmast_Studio_(WORKSHOP)_Swiss_Tools_at_the_workbench_Pfeil_Wood_Carving_Tools_Gouges,_Chisels,_Carving_Sets_(pic.z3).jpg)

Files remove material from metal, wood and plastic with hardened steel teeth, while chisels are edged cutting tools for shaping wood and cutting joints. Both are core hand tools, taught early because they build the feel and control that machines cannot replace.

Key Features

- File cuts: bastard, second and smooth
- Flat, half-round, round and triangular file shapes
- Chisel widths from 3 mm to 38 mm bevel-edge
- Bevel-edge chisels for joints, firmer for heavier work
- Handles with steel ferrules to resist splitting

Typical Uses in the Workshop

- File metal edges square and smooth
- Shape wood with chisels for joints and details
- Deburr sawn and drilled parts
- Sharpen and true up edges before assembly

Safe Operation

1. Fit the file handle and push across the work on the forward stroke
2. Use a bench block or vice so files cut true
3. Chisel with the bevel down for heavy cuts
4. Support the workpiece firmly before each stroke
5. Stop and check against the square as you work

SAFETY NOTES

- Files have no handles - always fit one before use
- Never use a file without a handle; the tang is sharp
- Keep hands behind the cutting edge of chisels
- Clamp work so it cannot move under the blade
- Store chisels with blade guards

Maintenance & Consumables

- Clean files with a file card after use
- Keep chisels sharp and stropped regularly
- Oil steel surfaces to prevent rust
- Keep file teeth clear of aluminium build-up
- Store chisels in a roll or rack, edges protected

Specification & Buying Notes

Buy a set of files in assorted cuts and shapes with handles, plus bevel-edge chisels in 6-25 mm sizes with a sharpening kit. Quality steel files and chisels last decades if looked after.