

Vinyl Cutters

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | 3D Printing, Laser & CNC



Photo: ???? ?????????? — CC BY-SA 4.0 — via Wikimedia Commons (Vinyl_Cutter.jpg)

A vinyl cutter is a plotter that drags a small blade across self-adhesive vinyl sheet, cutting shapes and letters without cutting through the backing paper. The cut vinyl is weeded and transferred onto signs, windows, t-shirts and products, making it a core machine for graphics and product decoration.

Key Features

- Cutting widths from 300 mm to 900 mm for school use
- Blade force and speed adjustable for vinyl types
- Drag blade with holder for fine lettering
- USB or software control from cutting programs
- Roll feed and pinch rollers for long runs

Typical Uses in the Workshop

- Cut lettering and logos for signs and displays
- Produce vinyl stickers for product prototypes
- Weed and apply transfer tape for window graphics
- Cut stencils and heat-transfer vinyl for textiles

Safe Operation

1. Load vinyl with the printed side up and align the rollers
2. Set blade force and speed for the vinyl thickness
3. Send the cut job from the software with a test cut
4. Weed excess vinyl with a weeding hook
5. Apply with transfer tape, working air bubbles out

SAFETY NOTES

- Keep fingers clear of the blade when it is out
- Use the blade guard when not cutting
- Do not run the cutter with the lid closed over hands
- Store blades so nobody grabs a bare edge
- Keep the area tidy to avoid trips around cables

Maintenance & Consumables

- Clean the pinch rollers and grit rollers regularly
- Check blade depth and rotate or replace dull blades
- Oil the carriage rails lightly per the manual
- Keep the cutting mat or bed free of vinyl residue
- Store vinyl rolls upright in a dry rack

Specification & Buying Notes

Choose a machine supported by good cutting software (Sure Cuts A Lot, Inkscape with plug-in, or the brand software). A 60 cm model covers most school jobs. Check blade and holder availability and that it rolls vinyl, not just sheets.