

Locking Pliers (Vise-Grips)

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



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Locking pliers clamp and hold like a portable vice, with a toggle mechanism that locks the jaws onto the work, freeing both hands. They clamp work for welding, hold nuts on stubborn threads and act as emergency clamps and wire cutters.

Key Features

- Toggle action locks the jaws
- Adjustable clamping force
- Straight, curved and needle nose types
- Wire cutter section on many
- Quick release levers

Typical Uses in the Workshop

- Clamp steel for tack welding
- Hold nuts and bolts being freed
- Grip small parts on the bench
- Emergency clamp for repairs

Safe Operation

1. Open the jaws wide and adjust the screw
2. Squeeze the handles to lock on the work
3. Adjust the screw for more grip
4. Release with the quick-release lever
5. Store with the jaws closed

SAFETY NOTES

- Locking pliers can crush - mind fingers
- Do not use as a hammer
- Keep the release lever clear of skin
- Do not over-clamp soft or thin parts
- Check the toggle and jaws for wear

Maintenance & Consumables

- Clean the jaw teeth of weld spatter
- Oil the pivot and screw
- Check the toggle mechanism
- Replace worn jaw pads
- Store in the tool drawer

Specification & Buying Notes

A set of straight, curved and needle-nose locking pliers covers holding and clamping. Quality steel jaws grip without slipping; cheap ones jump under load.