

Oxy-Acetylene Torch Kits

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Welding & Thermal Cutting



Photo: Daderot — Public domain — via Wikimedia Commons (Oxy-acetylene_torch,_France,_c._1906_-_Higgins_Armory_Museum_-_DSC05446.JPG)

An oxy-acetylene torch kit burns acetylene with oxygen for brazing, welding thin steel, heating and cutting metal, using a torch handle with interchangeable tips, hoses, regulators and gas cylinders. It is the classic gas process in every metal workshop.

Key Features

- Torch handles with cutting and welding attachments
- Tip sets for cutting and heating
- Oxygen and acetylene regulators
- Dual hose sets with flashback arrestors
- Trolley and cylinder setups

Typical Uses in the Workshop

- Cut steel plate and bars with the cutting torch
- Braise and solder with filler rod
- Heating for shrinking and bending
- Welding thin sheet with light practice

Safe Operation

1. Check flashback arrestors and hose condition
2. Open cylinders and set the pressures
3. Light and adjust the torch flame correctly
4. Cut with steady speed and angle
5. Close the torch valves and then the cylinders

SAFETY NOTES

- Acetylene is explosive under pressure - store and use correctly
- Check for leaks with soapy water
- Wear full dark goggles or a shade for glare protection
- Keep the torch away from oil and grease
- Secure cylinders and close valves after use

Maintenance & Consumables

- Clean tip orifices with tip cleaners
- Check hoses for ozone cracks
- Test regulators and gauges yearly
- Replace seals in the torch valves
- Keep the trolley and cylinder straps working

Specification & Buying Notes

Buy a complete kit with flashback arrestors, quality regulators and a cutting attachment. Acetylene cylinders come from a gas supplier with rental terms. Budget for tip cleaners and spare hoses.