

Carbon Arc Gouging Torches

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

A carbon arc gouging torch holds a carbon rod through which a high current arc melts the metal while compressed air blows the molten metal away, cutting grooves and removing welds fast. It is the quick way to remove defective welds, cut grooves and back-chip joints.

Key Features

- Carbon rod sizes 6-13 mm
- Air jets around the rod holder
- Cable connections for high current
- Torch head designs for light access
- Rod clamps with quick release

Typical Uses in the Workshop

- Remove defective welds and repair work
- Cut grooves in plate for welding
- Back-chip joints before sealing passes
- Cut through thick steel quickly

Safe Operation

1. Set the current for the rod size
2. Clamp the work and start the arc
3. Hold the rod at the gouge angle and feed slowly
4. Blow air to clear the molten metal
5. Keep a steady travel for a uniform groove

SAFETY NOTES

- The arc is brilliant - full welding PPE with dark shade
- Sparks and molten metal fly far - clear the area
- Ventilate strongly; smoke is heavy
- Do not point the arc at people
- Keep flammables well away

Maintenance & Consumables

- Clean the rod holder and contacts
- Check the air jets and hose
- Inspect the cable insulation
- Replace worn rod clamps
- Store the torch with the cable coiled

Specification & Buying Notes

A gouging torch with a set of carbon rods and the arc welder capacity to run it covers repair classes. Match the rod size to the current available. Buy rods in bulk with the torch.