

~ FABRICATION ~



METALWORK

OPERATING INSTRUCTIONS



METALWORK

INTRODUCING

the



PLASMA CUTTER



Plasma Cutter

Access Level 2 - (see Metal Workshop Induction Guide on Access Levels)

The plasma cutter is a hand held portable power machine that allows you to cut through all metals using very high temperature gas. The maximum thickness of steel this machine will cut is approximately 10mm

PPE Basic

- Suitable cotton-only work coat (provided)
- Leather gloves, rated to EN12477 & 407 (provided)
- Face shield labelled 'Use with plasma cutter' (provided)
- Additional Spectacles or Goggles rated to BS/EN166 (provided)
- Stout footwear

What to do before use

- **INFORM** a member of staff that you wish to use this equipment **BEFORE** starting work
- Persons who have **PACEMAKERS** or who are **PREGNANT** should not do this process or use this equipment
- **CHECK** that the compressor is **ON** - this is normally done by technical staff
- **CHECK** extraction is **ON** and report any faults to any member of workshop technical staff - such as the extraction not switching on **AFTER** the **ON** button is pressed
- **VISUAL** check of the machine for signs of damage to machine or electrical supply system
- **IF STUDENT**, report any faults to any member of workshop technical staff
- **IF STAFF**, E-mail the technical team to report if the machine needs maintenance or servicing and whether it will need to be taken out of operation and for how long
- **ENSURE** that there are no combustible materials in the area, including on your **PERSON** - lighters, etc.

How To Use The Plasma Cutting Machine

- Refer to any **OPERATING INSTRUCTIONS** given during training or timetabled workshops
- **ENSURE** you are wearing the correct PPE; Work coat, Leather gloves and Face shield labelled 'Use with plasma cutter'
- **ENSURE ALL** skin is covered and hair is tied back
- **SHUT** the curtains to the area, isolating the welding light from **OTHERS** sharing the space
- **ENSURE** the **EARTH CLIP** (or **RETURN LINE**) is secured to the metal bench or **DIRECTLY** to the material being cut if it is **VERY LARGE**
- Turn **ON** the machine at the switch on the front face
- Set the **AMPS** to a low setting to **START** – you can always raise the power levels should the cutting unit **NOT** cut through the metal
- To **USE** the torch, lift the **YELLOW** tab while grip the **RED** lever – this **WILL** take time to master, it is **NOT** a 100% reliable method
- Lightly 'kiss' the **SURFACE** of the metal with the nozzle tip
- **ADJUST** the **AMP** setting and speed of **YOUR** movement to get the desired cut with the **CLEANEST** edge
- When finished, turn **OFF** the machine put away the torch carefully, ready for the next user
- You **MUST NEVER** leave the unit switched **ON** unattended – i.e. walking away with the unit **ON**. This is potentially the **MOST DANGEROUS** thin you could do with this machine
- Turn **OFF** extraction
- Clear away any work/debris; wearing spectacles or goggles, sweep away dust into a dust pan, including any on the floor and put in the bin dedicated for metal waste – **NOT** the General waste

Date

I verify that I have read and understood the information detailed within this document

Name

Signature