

Safe Work Procedure: Using Plasma Cutter

Department/Area:	Approved by:	Date Created:	Review/Revision Date:
Maintenance	Workplace Safety and Health Committee	Dec. 1, 2023	Annually

Potential Hazard	Risk level
Electrical	High
Noise	Low
Combustibles/flammables	High
Radiation burns	Medium
Body burns	High
Noxious gas	Medium
Flying sparks and falling slag	High
Compressed air	Low

Risk control devices, personal protective equipment, and other safety considerations	Training/Reference info
<ul style="list-style-type: none"> • Safety glasses must be worn at all times in addition to welding mask • Approved safety shoes • Respiratory protection devices may be required. • Close fitting protective clothing to cover arms and legs. • Hearing protection when cutting thick material. • Oil free leather gloves. • A welding mask with shade number 11 protective filters. 	<ul style="list-style-type: none"> • Operations manual • On-the-Job training • WHMIS

Note: Common signs and symptoms of a musculoskeletal injury (MSI) can include pain, burning, swelling, stiffness, numbness/tingling, and/or loss of movement or strength in a body part. Report these to your supervisor.

The direct supervisor must ensure that employees who report to him/her are trained and follow this safe work procedure.

Steps to complete this task safely:

PRE-OPERATIONAL SAFETY CHECKS

1. Locate and ensure you are familiar with all machine operations and controls
2. Ensure material to be cut poses no hazard. Consult the manufacturers' Material Safety Data Sheets (MSDS) for specific technical data and precautionary measures for any materials or coatings on materials cut with this equipment.
3. Check workspaces and walkways to ensure no slip/trip hazards are present.
4. Ensure the work area is clean and clear of grease, oil and any flammable materials.
5. Keep the equipment, work area and your gloves dry to avoid electric shocks.
6. Ensure the gloves, handpiece and work leads are in good condition.

7. Ensure other people are protected from flashes by closing the curtain to the welding bay or erecting screens.
8. Start the fume extraction unit before beginning cutting operation. Ensure machine is used in a well-ventilated area if not used in a welding bay.
9. Ensure the work leads and hoses do not create a trip hazard.

OPERATIONAL SAFETY CHECKS

1. Ensure machine is correctly set up for current and airflow.
2. Ensure work return earth cables make firm contact to provide a good electrical connection.

ENDING OPERATIONS AND CLEANING UP

1. Switch off the machine and fume extraction unit when work is completed.
2. Turn off the air supply and hang up handpiece, hose and welding cables.
3. Leave the work area in a safe, clean and tidy state.

DON'T

1. Do not use faulty equipment. Immediately report suspect equipment.
2. Do not weld or cut containers that have held combustible liquids or gases.
3. Do not heat or cut metals coated with or containing materials that emit toxic fumes, unless coating is removed from the work surface.
4. Never leave the machine running unattended.