

SOP (LASER CUTTER)

SS-WHS-SAF-000

Authorised By:
Rev 1 19/03/2024



TASK	Laser Cutter					
HAZARDS	Flying debris	<input type="checkbox"/>	Heat / cold	<input type="checkbox"/>	Electricity	<input checked="" type="checkbox"/>
	Cuts / laceration	<input type="checkbox"/>	Dust	<input type="checkbox"/>	Rollover	<input type="checkbox"/>
	Pinch / crush	<input checked="" type="checkbox"/>	Noise / vibration	<input type="checkbox"/>	Plant interaction	<input type="checkbox"/>
	High pressure	<input type="checkbox"/>	Chemical	<input checked="" type="checkbox"/>	Eye Irritation	<input checked="" type="checkbox"/>
PPE REQUIRED						

PRE-START CHECKS

1. Ensure all personnel are trained and authorized to operate the laser cutter.
2. Inspect the laser cutter for any visible damage or signs of wear.
3. Check that the laser tube, focusing lens, and mirrors are clean and aligned.
4. Verify that the work area is clear of flammable materials and properly ventilated.
5. Ensure it is connected to a suitable power source with all all connections secure.
6. Confirm that fire extinguishing equipment is readily available in case of emergency.

SAFE OPERATING PROCEDURE

1. Wear appropriate personal protective equipment (PPE) including safety glasses with side shields, a face shield, and gloves.
2. Secure the workpiece using clamps or fixtures to prevent movement during cutting.
3. Set up the laser cutter parameters such as power, speed, and frequency according to the material type and thickness.
4. Load the file into the laser cutter software and verify the settings before initiating.
5. Activate the laser cutter and initiate the cutting or engraving process using the control panel or software interface.
6. Monitor the operation closely, ensuring that the laser beam remains focused on the workpiece and that cutting or engraving progresses smoothly.
7. Be aware of any smoke, fumes, or odors generated during cutting or engraving and ensure proper ventilation is maintained.
8. Avoid opening the enclosure or interfering with the laser beam while in operation.
9. After cutting or engraving is complete, turn off the laser cutter and allow it to cool down before opening the enclosure or removing the workpiece

POST-OPERATION PROCEDURE

1. Inspect the cut or engraved workpiece for quality and completeness, making any necessary adjustments to the cutting parameters for future reference.
2. Clean up the work area, removing any debris or waste material generated during cutting or engraving.
3. Dispose of scrap material and any waste materials such as used protective film or masking tape properly according to company guidelines.
4. Perform routine maintenance tasks such as cleaning the lens and mirrors, checking for loose connections, and inspecting the ventilation system.
5. Store the laser cutter and accessories in a designated area, ensuring they are protected from damage and unauthorized use.