



SOP (3D PRINTER)

SS-WHS-SAF-000

Authorised By:
Rev 1 19/03/2024



| TASK | 3D Printer | | | | | |
|--------------|--|-------------------------------------|-------------------|-------------------------------------|-------------------|-------------------------------------|
| HAZARDS | Flying debris | <input type="checkbox"/> | Heat / cold | <input checked="" type="checkbox"/> | Electricity | <input checked="" type="checkbox"/> |
| | Cuts / laceration | <input type="checkbox"/> | Inhalation | <input checked="" 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"/> | Fire | <input checked="" type="checkbox"/> | Other: | <input type="checkbox"/> |
| PPE REQUIRED |   | | | | | |

PRE-START CHECKS

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.
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.

SAFE OPERATING PROCEDURE

1. Wear appropriate personal protective equipment (safety glasses and gloves).
2. Load the 3D model file into the printer software and verify the settings before initiating the print.
3. Level the build plate or print bed to ensure proper adhesion of the first layer.
4. Start the printing process and monitor the operation closely, ensuring that the filament feeds properly and that the print progresses smoothly.
5. Investigate any unusual noises, odors, or smoke during printing.
6. Avoid opening the printer enclosure or interfering with the print head while the machine is in operation.
7. If any issues or errors occur during printing, stop the print immediately and troubleshoot the problem before resuming.
8. After printing is complete, remove the finished object from the build plate or print bed carefully to avoid damage.

POST-OPERATION PROCEDURE

1. Inspect the printed object for quality and completeness, making any necessary adjustments to the printing parameters for future reference.
2. Clean up the print area, removing any stray filament or waste material from the printer and work area.
3. Dispose of any unused or excess filament properly according to company policy.
4. Perform routine maintenance tasks such as cleaning the print head and build plate, checking for loose connections, and lubricating moving parts.
5. Store the 3D printer and accessories in a designated area, ensuring they are protected from damage and unauthorized use.