# Personal Protective Equipment

- Rings and jewellery must not be worn.

## Potential Risks

<table>
<thead>
<tr>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire. A Carbon Dioxide (CO2) extinguisher or fire blanket is recommended for fighting material fires.</td>
</tr>
<tr>
<td>Laser burns to eyes or body.</td>
</tr>
<tr>
<td>Body burns due to hot or molten materials.</td>
</tr>
<tr>
<td>Electric shock.</td>
</tr>
<tr>
<td>Fumes.</td>
</tr>
</tbody>
</table>

## DON'Ts

- Do not use faulty equipment. Immediately report suspect equipment to your supervisor.
- Do not use if interlocks are damaged or defeated.
- Do not arm the laser until the booth lid is closed and locked.
- Do not wear reflective items.
- Do not work alone.
- Do not heat or cut metals coated with or containing materials that emit toxic fumes, unless coating is removed from the work surface.

## Pre-Operational Safety Checks

- Ensure you are authorised to use the laser cutter and you are familiar with all controls.
- Ensure material to be cut poses no hazard. If required, 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.
- Ensure the power settings match the materials being cut.
- Check that personnel have taken off all specular reflectors (rings & jewellery).
- Ensure the work area is clean and clear of clutter and any flammable materials.
- Ensure power cords do not create a tripping hazard.
- Ensure the lid is closed and locked.

## Operational Safety Checks

- Do not stare at the laser beam.
- Do not let the laser run unattended.
- Monitor the cutting process for smouldering or fire. *If a fire breaks out, use the emergency stop switch to turn off the machine, then fight the fire with a CO2 extinguisher or a fire blanket. Do not use the machine again until it has been checked as safe by an electrician.*

## Ending Operations and Cleaning Up

- Switch off the laser and allow fumes to be extracted.
- Verify there is no smouldering material or residue.
- Leave the work area in a safe, clean and tidy state.
- Clean the cutting tray if there is a build-up of dust or ash.