Risk Assessment Guidance

Title Soldering

This risk assessment guidance has been produced for soldering irons within workshops.

Soldering irons must never be left unattended when hot or cooling, where high volumes of soldering will take place good natural ventilation should be available where this is not possible local filtration should be put in place.

Soldering irons must have suitable stands to support the soldering iron safely.



| Job Sequence | Hazard Identification | Controls | |
|--------------------------------|----------------------------------|---|--|
| Conduct pre-operational checks | Damaged parts. | All equipment must be checked before use, ensure leads are in good condition and that there is no damage to the soldering iron. | |
| | | There should be a suitable stand in place to support the hot iron and either good ventilation of the local filter. A fire extinguisher should be close to where these works are taking place in case of fire. | |
| Occupational Health | Burns, Temperature. | The tip of the iron is at a temperature around 300°C and ca cause burns to skin. | |
| | | Components being soldered will be at an elevated temperature for a short while after contact with the iron which can also cause minor burns and a sudden physical reaction to them which can cause other problems. | |
| | | Components should not be wet as contact with molten solder can cause spatter. | |
| | Fumes. | The soldering process gives off fumes from flux in the solder and minute quantities of vaporised solder. These can be harmful in high concentrations or over prolonged periods of exposure. | |
| Electrical Safety | Portable Appliance Testing. | All electrical appliances must be tested at a minimum every twelve months. They should be regularly inspected for any damage or signs of overloading. Only competent persons must carry out repairs including replacement of fuses. | |
| | Overloading electrical circuits. | 'Daisy chaining' of electrical supplies must be avoided. Where possible soldering irons should always be fed directly for the fixed electrical installation within the workshop. | |
| | Trailing leads. | All electrical leads should be run to avoid trailing leads in walkways or work areas that can lead to damage of the electrical appliances and trip hazards. | |
| | Fixed electrical supplies. | The fixed electrical installation is managed by the company. All equipment is 240V and should be PAT tested and labelled accordingly with a register held by the supervisor. | |
| Chemical Safety | СОЅНН | There are material safety data sheets for all chemicals within the workshop including solder and flux. | |

Risk Assessment Guidance

| | Use of substances. | When using substances, you must ensure that you have checked the COSHH risk assessment and where applicable have and use the correct PPE. |
|-----------|------------------------|--|
| Fire | Flammable materials. | Areas where the soldering irons are used must be kept clear of flammable materials. CO ₂ fire extinguisher located in close proximity – test date less than 12 months old. All works must be carried out in accordance with the coompanys 'Hot Works Permit' Has to be issued by the designated person from the company. Soldering irons must never be left unattended while the power is on or while heating / cooling. Fire risk assessment undertaken as required by law – see Regulatory Reform (Fire Safety) Order 2005. |
| Accidents | Reporting. First aid. | All accidents must be reported to the supervisor, if medical treatment is required the appointed medical personnel should be contacted and an accident report issued to the appointed Health and Safety personnel. Make sure you are aware of the first aid provisions in place. All accidents & near misses must be reported to your Supervisor |
| Training | Untrained Person | The Supervisor must ensure that the appointed Health and safety personnel is notified of any significant changes to the controls above |

All persons working with this equipment or within close vicinity must sign and show that they have read and understood the risk assessment guidance and that they will follow the above control measures set out whilst working.

| Additional Guidance | COSHH Assessment | Method Statement | Other (Specify) |
|------------------------|--------------------|---------------------|--|
| | Material Dependent | N/A | Hot Works Permit Only trained personnel to use the equipment |
| Name | | | |
| Signed | | | Date |