

STANDARD OPERATING PROCEDURE

Soldering Iron

DO NOT use this tool unless you have been trained and assessed to a competent level in its safe use and operation, and have been given permission to use this equipment.



Safety glasses must be worn when operating this equipment.



Long and loose hair must be contained when operating this equipment.



Covered footwear must be worn when operating this equipment.

PRE-OPERATIONAL SAFETY CHECKS

1. Ensure that risk assessment has been read. **UQ risk assessment task ID #2297.**
2. When using Butane Gas Soldering Iron ensure **UQ risk assessment task ID #10734** has been read
3. Check workspace and walkways to ensure no slip-hazards are present.
4. Check electrical equipment is fitted with a current electrical safety test tag.
5. Examine the power cord for damage.
6. Locate and ensure you are familiar with the operation of the ON/OFF switch.
7. Ensure the correct size tip is selected for the job.
8. Adjust the tip temperature to suit the required thermal transfer during soldering (nominally 340°C for tin/lead solder, 370°C for lead-free).
9. Refer to relevant MSDS of all chemicals intended for use during the soldering process.
10. Faulty equipment must not be used. Immediately report suspect equipment.

OPERATIONAL SAFETY CHECKS

1. Never carry a power tool by the power cord or disconnect the tool by yanking the power cord.
2. Ensure that the work piece is securely held or clamped whilst working.
3. Between operations, ensure tool is rested safely to prevent inadvertent contact with skin or material.
4. Use a safe working posture (beware of hair, skin or clothing in contact with hot tip).
5. When using stereo microscope, ensure hot tip is in lens field of view before looking into microscope to avoid unguided contact with skin/hand.
6. Ensure adequate ventilation or, whenever possible, use fume extraction/filtration.
7. Wherever possible, use lead-free solder.
8. When using flux or solder paste, always clean the work piece upon completion to remove residue.
9. Clean tip before and after applying solder

HOUSEKEEPING

1. Allow all tools and work pieces to cool down before handling or storing.
2. Ensure tool is rested on an appropriate stand or bench whilst cooling.
3. Switch off the tool when not in use.
4. Return all tooling and fixtures to the correct storage location.
5. Ensure the equipment and work area are in a safe, clean and tidy state after job is completed.
6. Return surplus material to stock & dispose of waste material in an appropriate recycling or waste bin
7. Always wash your hands after handling solder wire, solder paste and/or flux.

POTENTIAL HAZARDS

- Burns from hot tool tips
- Inhalation of fumes, in particular from tin/lead solder
- Fire (Butane Gas Soldering Irons)
- Electric Shock
- Eye injuries

FORBIDDEN

- Removal or modification of safety devices
- Heating combustible/toxic materials, substances, plastics
- Changing Butane Gas cylinder refills near ignition source
- Distracting operator
- Using equipment with lapsed test tag

This SOP does not necessarily cover all possible hazards associated with the machine and should be used in conjunction with other references. It is designed to be used as an adjunct to teaching Safety Procedures and to act as a reminder to users prior to machine use.