

ILLUSIONS AUSTRALIA

SAFE WORK PROCEDURE

SWP 073 – SOLDERING IRON

1. PURPOSE AND SCOPE

Minimum requirements for safe use of electric soldering irons at Illusions Australia.

Applies to small electrical/electronic soldering and similar approved bench work.

2. AUTHORISATION AND COMPETENCY

Workers must understand burn, electrical, fume and lead/flux hygiene hazards relevant to the solder being used.

Electrical repairs to the iron/station must be undertaken only by authorised competent persons.

3. REQUIRED PPE

The following PPE must be worn as appropriate:

- Safety glasses where solder spatter is possible.
- Heat-resistant finger protection/tools where appropriate.
- Suitable ventilation/local fume extraction.
- Gloves are generally not required for fine soldering but may be used for chemical cleanup if appropriate to the product.

4. PRE-START CHECKS

Before commencing work, confirm that:

- Iron/station, lead, plug, stand and temperature controls are serviceable.
- Correct tip and solder/flux are available.
- Stable heat-resistant stand is positioned close to the work.
- Fume extraction/ventilation is operating.
- Flammables are removed from the immediate area.
- Workpiece is secured and bench is uncluttered.

5. SAFE OPERATING PROCEDURE

1. Place iron in its stand and set the minimum suitable temperature.
2. Start fume extraction.
3. Secure the workpiece.
4. Handle the iron only by the insulated grip.
5. Keep the hot tip away from leads, skin and combustibles.
6. Use tools/tweezers rather than fingers near heated joints.
7. Return iron to stand whenever not actively soldering.
8. Wash hands after soldering, especially where lead-containing solder is used.

9. Switch off/unplug after use and allow to cool before storage or tip work.

6. PROHIBITED PRACTICES

Workers must not:

- Touch the heated tip.
- Leave a hot iron lying on the bench.
- Leave an energised iron unattended.
- Eat, drink or smoke in the immediate soldering work area where lead/flux contamination may occur.
- Use damaged electrical equipment.
- Clean hot tips or residues by unsafe methods.
- Use solder/flux without considering its SDS where hazardous.

7. FUMES AND HYGIENE

Flux fumes can irritate the respiratory system; some solders may contain lead.

- Use local extraction close to the source.
- Avoid placing face over the work.
- Wash hands before eating/drinking.

8. BURNS AND FIRE

Tips and recently soldered components remain hot.

- Use a stable stand.
- Keep combustibles clear.
- Allow components to cool before handling.

9. FAULTS, DAMAGE AND ABNORMAL CONDITIONS

Stop for damaged lead, overheating station, uncontrolled temperature, smoke/fire, failed extraction or unusual electrical behaviour.

Isolate and tag defective equipment.

10. SHUTDOWN AND HOUSEKEEPING

- Switch off and unplug.
- Leave iron in stand until fully cool.
- Clean bench and collect solder residues appropriately.
- Wash hands.
- Store equipment safely and report defects.

11. EMERGENCY AND INCIDENT RESPONSE

1. Stop the equipment or activity immediately.
2. Isolate the hazard or energy source where safe to do so.
3. Provide or obtain first aid as required.
4. Notify the Foreman, Leading Hand or other authorised Illusions Australia representative.

5. Call emergency services where required.
6. Do not recommence until the incident, defect or unsafe condition has been addressed.

12. STOP WORK REQUIREMENT

Work must stop where:

- Iron/stand is damaged.
- Ventilation/extraction is inadequate.
- Combustibles cannot be controlled.
- Product hazards are unknown.
- Abnormal heating or electrical fault occurs.

No production requirement or deadline takes priority over safe work.

DOCUMENT CONTROL

Document	SWP 073 – Soldering Iron
Document Type	Safe Work Procedure
Prepared By	Aidan McDonnell
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