

ILLUSIONS AUSTRALIA

SAFE WORK PROCEDURE

SWP 042 – HOT WORKS - GENERAL

1. PURPOSE AND SCOPE

This Safe Work Procedure establishes minimum requirements for hot work at Illusions Australia, including welding, thermal cutting, brazing and spark-producing work where an ignition risk exists.

It supplements any task-specific SWP or SWMS. Where a permit or client/site hot-work system applies, that system must also be followed.

2. AUTHORISATION AND COMPETENCY

Hot work may only be undertaken by workers competent and authorised for the specific equipment/process.

Workers must understand fire prevention, gas-cylinder/electrical hazards, fumes, burns, exclusion zones and emergency controls.

3. REQUIRED PPE

The following PPE must be worn as appropriate:

- Process-appropriate eye/face protection.
- Flame-resistant/protective clothing appropriate to the process.
- Safety footwear.
- Suitable gloves.
- Hearing protection where required.
- Respiratory protection where ventilation/extraction does not adequately control exposure and its use is part of the assessed controls.

4. PRE-START CHECKS

Before commencing work, confirm that:

- The hot-work area has been assessed for combustible materials and hidden fire paths.
- Required permit/SWMS controls are in place.
- Suitable fire extinguisher or other fire-fighting equipment is accessible.
- Ventilation/fume extraction is adequate.
- Gas cylinders, hoses, leads and equipment are serviceable and correctly positioned.
- Screens/exclusion controls protect others from sparks, radiation and hot material.
- Emergency exits and fire equipment remain accessible.
- A fire watch/post-work inspection arrangement is established where required.

5. SAFE OPERATING PROCEDURE

1. Remove combustible material where practicable or protect it with suitable fire-resistant controls.
2. Establish the exclusion zone and warning controls.

3. Set up welding/cutting equipment in accordance with the specific SWP and manufacturer requirements.
4. Start ventilation/extraction.
5. Maintain control of sparks, slag, hot metal and heat transfer throughout the task.
6. Keep gas cylinders upright/secured and protected from heat and impact.
7. Monitor surrounding and adjoining areas for ignition.
8. Stop work if fire controls, ventilation or exclusion arrangements fail.
9. At completion, isolate equipment and inspect the area for smouldering or delayed ignition for the required period.

6. PROHIBITED PRACTICES

Workers must not:

- Perform hot work without required authorisation/permit controls.
- Work near flammable vapours or uncontrolled combustible dust.
- Direct sparks toward cylinders, hoses, people or combustible materials.
- Use damaged welding leads, gas hoses or regulators.
- Leave hot work unattended where fire risk remains.
- Assume a surface is cool immediately after work.
- Undertake hot work in an atmosphere or confined area that has not been properly assessed.

7. FIRE WATCH AND POST-WORK CHECK

Hot particles can lodge in cracks, cavities or adjacent areas and ignite after work has stopped.

- Inspect both sides of walls/floors where heat may transfer.
- Maintain a fire watch where required.
- Do not remove fire controls until the area is confirmed safe.

8. FUMES AND VENTILATION

Welding, cutting and heating can generate hazardous fumes and gases.

- Use local extraction/ventilation appropriate to the process and material.
- Identify coatings/materials before heating.
- Stop if ventilation fails or workers experience irritation.

9. FAULTS, DAMAGE AND ABNORMAL CONDITIONS

Stop immediately for fire, gas leak, damaged equipment, ventilation failure, uncontrolled sparks, electrical fault or unsafe atmosphere.

Raise the alarm and evacuate where required.

10. SHUTDOWN AND HOUSEKEEPING

- Shut down and isolate equipment.
- Close gas-cylinder valves where applicable.
- Mark/segregate hot material.
- Inspect for smouldering/ignition.
- Remove waste and restore the area only when safe.

- Report defects/incidents.

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:

- Required permit/SWMS controls are absent.
- Combustibles or flammable atmosphere cannot be controlled.
- Ventilation is inadequate.
- Fire-fighting equipment is unavailable.
- Equipment is defective.
- The work area cannot be adequately isolated.

No production requirement or deadline takes priority over safe work.

DOCUMENT CONTROL

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