

ILLUSIONS AUSTRALIA

SAFE WORK PROCEDURE

SWP 013 – CUT-OFF WHEEL - CUT-OFF SAW

1. PURPOSE AND SCOPE

Minimum requirements for safe use of abrasive cut-off saws and cut-off wheels at Illusions Australia.

Applies to fixed or portable abrasive cutting equipment used on approved materials.

2. AUTHORISATION AND COMPETENCY

Only competent workers may operate cut-off equipment.

Operators must understand wheel selection, guarding, clamping, spark control and wheel-fragment hazards.

3. REQUIRED PPE

The following PPE must be worn as appropriate:

- Safety glasses and face protection.
- Hearing protection.
- Safety footwear.
- Suitable respiratory protection where dust/fume controls require it.
- Protective clothing appropriate to sparks and hot material.

4. PRE-START CHECKS

Before commencing work, confirm that:

- Wheel is correct for the material, diameter and machine speed.
- Wheel is undamaged and securely mounted.
- Guard is fitted and correctly positioned.
- Workpiece clamp/vice is serviceable and work is secure.
- Spark path is clear of people and combustibles.
- Electrical supply/lead is serviceable.
- Area is ventilated and required hot-work controls are in place.

5. SAFE OPERATING PROCEDURE

1. Secure the workpiece firmly.
2. Position guard and establish a safe stance out of the wheel plane.
3. Start the machine clear of the work and allow full speed.
4. Lower/apply the wheel smoothly without side loading.
5. Use controlled pressure and maintain alignment.
6. Allow the cut to complete without twisting the wheel.
7. Switch off and wait for the wheel to stop before raising/moving the machine or removing material.

8. Treat cut material as hot.

6. PROHIBITED PRACTICES

Workers must not:

- Use a damaged, incorrect or under-rated wheel.
- Operate without the guard.
- Cut unsecured work.
- Twist, bend or side-load the wheel.
- Force or jam the wheel.
- Reach into the wheel path while moving.
- Cut where sparks can ignite materials without controls.
- Change wheels while energised.

7. WHEEL FAILURE AND KICKBACK

Abrasive wheels can shatter if damaged, side-loaded or incorrectly selected.

- Inspect before use.
- Keep work aligned.
- Stand clear of the wheel plane during start-up.
- Use only manufacturer-compatible wheels.

8. SPARKS, HOT METAL AND FIRE

Cutting can produce a significant spark stream and hot offcuts.

- Remove/protect combustibles.
- Provide fire controls where required.
- Mark or segregate hot material until safe.

9. FAULTS, DAMAGE AND ABNORMAL OPERATION

Stop for vibration, wheel damage, binding, guard movement, electrical fault, smoke or unusual noise.

Isolate before inspection or wheel replacement.

10. SHUTDOWN AND HOUSEKEEPING

- Switch off and wait for complete stop.
- Isolate before adjustments.
- Allow hot material to cool safely.
- Clean abrasive/metal debris.
- Store wheels dry and protected from damage.
- Report defects.

11. EMERGENCY AND INCIDENT RESPONSE

1. Stop the equipment or activity immediately.
2. Isolate energy sources 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:

- Correct wheel or guard is unavailable.
- Work cannot be clamped.
- Spark/fire controls are inadequate.
- Wheel condition is doubtful.
- Machine vibrates or behaves abnormally.

No production requirement or deadline takes priority over safe work.

DOCUMENT CONTROL

Document	SWP 013 – Cut-Off Wheel - Cut-Off Saw
Document Type	Safe Work Procedure
Prepared By	Aidan McDonnell
Approved By	Managing Director
Status	Controlled Document