

ILLUSIONS AUSTRALIA

SAFE WORK PROCEDURE

SWP 003 – ANGLE GRINDER

1. PURPOSE AND SCOPE

This Safe Work Procedure establishes minimum requirements for safe selection, setup, operation and shutdown of angle grinders at Illusions Australia.

It applies to grinding, cutting and surface preparation using portable angle grinders.

2. AUTHORISATION AND COMPETENCY

Only workers competent in angle-grinder operation may use the equipment.

Workers must understand wheel selection, guard positioning, kickback hazards and safe isolation before changing discs.

3. REQUIRED PPE

The following PPE must be worn as appropriate:

- Safety glasses plus face protection where there is risk from sparks or fragments.
- Hearing protection.
- Safety footwear.
- Suitable respiratory protection where dust or fumes are generated.
- Close-fitting protective clothing appropriate to sparks and hot particles.
- Gloves suitable for handling material, provided they do not create an additional hazard during the task.

4. PRE-START CHECKS

Before commencing work, confirm that:

- The grinder, lead/battery, switch, side handle and guard are serviceable.
- The disc is the correct type, diameter and rating for the grinder and task.
- The disc has no cracks, chips, excessive wear or other damage.
- The guard is fitted and positioned between the operator and the disc.
- The side handle is fitted where designed and allows two-handed control.
- The workpiece is secure.
- The area is clear of combustible materials or hot-work controls are in place where required.
- Other persons are clear of the spark, fragment and kickback zones.
- Dust extraction or other controls are available where required.

5. SAFE OPERATING PROCEDURE

1. Select the correct grinder and disc for the material and operation.
2. Secure the workpiece and establish a safe body position.
3. Position the guard and side handle correctly.

4. Hold the grinder firmly with both hands where designed for two-handed operation.
5. Start the grinder clear of the workpiece and allow it to reach operating speed.
6. Apply the disc to the work at the appropriate angle for the disc type.
7. Use light, controlled pressure and allow the tool to do the work.
8. Keep the power lead, clothing and body clear of the disc.
9. Direct sparks and debris away from people, combustible materials, glass and vulnerable equipment.
10. After completing the cut or grind, remove the tool from the work and switch off.
11. Maintain control until the disc has stopped completely before putting the grinder down.

6. PROHIBITED PRACTICES

Workers must not:

- Operate without the required guard.
- Fit a disc that is oversized, damaged, unsuitable or rated below the grinder speed.
- Use a grinding disc for cutting unless specifically designed for that purpose.
- Twist or side-load a cutting disc.
- Force the disc or deliberately stall the grinder.
- Put the grinder down while the disc is rotating.
- Change discs without isolating the tool.
- Grind or cut where sparks can ignite combustible material without appropriate hot-work controls.
- Use the grinder one-handed where the design requires two-handed control.

7. KICKBACK AND DISC FAILURE

Kickback can occur if the disc binds, snags or is misused. Disc failure can project fragments at high speed.

- Keep the disc aligned with the cut.
- Do not jam or force a cutting disc.
- Support work so the cut does not close onto the disc.
- Stand out of the likely kickback path.
- Use only manufacturer-compatible guards and accessories.

8. HOT WORK, SPARKS AND FIRE

Grinding and cutting can generate sparks and hot metal. Where the activity creates an ignition risk, apply the relevant Illusions Australia hot-work controls.

- Remove or protect combustible materials.
- Provide suitable fire-fighting equipment where required.
- Check the area after completion for smouldering or ignition.

9. FAULTS, DAMAGE AND ABNORMAL OPERATION

Stop immediately for excessive vibration, damaged disc, unusual noise, loss of guard security, electrical fault, smoke or loss of control.

Isolate the grinder before inspection or disc replacement. Defective equipment must be tagged out of service.

10. SHUTDOWN AND HOUSEKEEPING

- Switch off and maintain control until the disc stops.
- Isolate or remove the battery before adjustments, cleaning or disc changes.
- Allow hot workpieces to cool or identify them as hot.
- Clean the work area and remove grinding debris safely.
- Store the grinder and discs to prevent 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:

- The correct guard or disc is unavailable.
- The disc is damaged or the grinder vibrates abnormally.
- The workpiece cannot be secured.
- Sparks or debris cannot be safely contained.
- Required hot-work, dust or respiratory controls are unavailable.
- The operator cannot maintain stable two-handed control.

No production requirement or deadline takes priority over safe angle grinder work.

DOCUMENT CONTROL

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