

ANGLE GRINDER SOP

ACRONYMS

LOTO - Lockout/Tagout.
 PPE - Personal Protective Equipment.
 SOP - Safe Operating Procedure.

HAZARDS - What can cause harm?

- ▲ Noise
- ▲ Electricity
- ▲ Moving parts/objects
- ▲ Sparks
- ▲ Hot objects
- ▲ Manual Handling
- ▲ Poor housekeeping

PRECAUTIONS

- All operators are trained and competent to operate an Angle Grinder safely. Operator training should include:
 - Workplace induction
 - Safe operating procedures
 - Manufacturer's instructions
 - Nature of hazards
 - Fitting of PPE
 - Manual handling
 - Housekeeping
 - First Aid



Adequate lighting

MAINTENANCE

- Follow LOTO procedures. Record service/repairs information in Maintenance Log. Maintenance is conducted as per manufacturers' instructions and by qualified persons only
- When the machine is taken out of service for maintenance:
 - Shut off and isolate the power supply
 - The power supply is clearly labelled/tagged "do not use."



PPE



PRE-OPERATIONAL INSPECTION

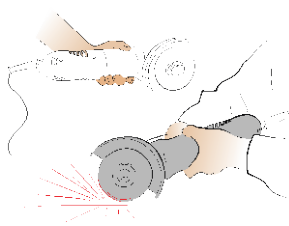
- Follow the pre-operational checklist in the manufacturer's operational manual, ensure:
 - It is inspected before each use and before being connected to the air supply hose
 - Emergency stops and safety devices tested and functional
 - Guards are fitted, secure, and functional
 - Wheels are sharp, clean, properly clamped, and undamaged
 - Handles are clean, dry, and free of oil & grease
 - Moving parts are aligned
 - Triggers do not stick or faulty
 - No loose or missing screws, nuts, bolts
 - No air/fluid leaks
 - Outside casing not damaged
 - The tool is not modified.

ANGLE GRINDER SOP

Cutting metal with a grinder is more dangerous than grinding. Kickback occurs when the blade gets caught between two pieces of metal, and the energy from the grinder causes the grinder disc to be thrust back violently towards the operator. Additional PPE is required, such as a face shield, leather gloves, and leather sleeves.

OPERATION

1. Operate following manufacturers' instructions
2. Wear prescribed PPE
3. Remove combustibles and flammables (such as oily rags etc.) from the area
4. Make all adjustments
5. Plug in the grinder or ensure battery is securely connected
6. Secure workpiece
7. Use both hands and grip both handles securely
8. Do not apply pressure during use
9. Run to speed before contacting workpiece
10. Direct sparks away from the body and other persons
11. Do not allow the disc to bump/contact workpiece or other objects
12. Do not stand directly behind the grinding process
13. Grind at a 15–30-degree angle to work
14. Ensure clear view of workpiece and area
15. Operate in standing position – do not sit with workpiece between legs
16. Ensure the disc has completely stopped before placing the unit down
17. When not in use, disconnect power and place on the bench with disc facing upwards
18. Turn off after use.



***Check for sparks or smouldering.
Use a Spotter during operation as
required.***

CHANGING DISCS

1. Disconnect from power
 2. Place unit on a firm, sturdy surface
 3. Use manufacturer's supplied spanner (or other tools as recommended by the manufacturer) to undo spindle nut
 4. Use a brush to clean out dust/debris from the guard, spindle and backing plate (wear gloves and eye protection)
 5. Install correct disc, nuts, and washers as per manufacturers' instructions – ensure correct placement/sequence
 6. Firmly tighten
 7. Test the disc is secured before next use.
- × **DO NOT** operate an angle grinder within 50ft/15m of:
- Grass/vegetation/timber and other combustibles
 - Flammable storages
 - Gas maintenance access points
 - Stormwater drains
 - Rivers or sensitive environmental areas
 - Pressure vessels and tanks (including pipelines, flanges, vents, and valves).