



# STANDARD OPERATING PROCEDURE

## SOP Angle Grinders

**DO NOT use this machine unless you have been instructed in its safe use and operation and authorised by your Supervisor**



Safety Glasses must be worn at all times



Face Shield must be worn



Hi-Vis/ Protective Clothing required



Hearing Protection required



Safety Boots required



Rings and jewellery must not be worn

### PRE-OPERATIONAL SAFETY CHECKS

1. Inspect lead and plug for damage; current electrical test tag attached.
2. When using pneumatic type, check airline and connections.
3. Check casing for damage, cracks and missing screws.
4. Ensure angle grinders have a DEAD-MAN switch as part of the handle grip.
5. Ensure the correct disc is fitted (Cutting disc for cutting, grinding disc for grinding).
6. Ensure the disc is free of defects. Do not fit a disc if dropped, damaged or wet.
7. Ensure the correct flange and locking nut is in place for the type of disc being used.
8. Ensure discs are correctly rated (RPM's) to the electrical drive motor.
9. Ensure the guard is in place and the handle is secured tightly. Only the original manufactures supplied anti-vibration type handle must be fitted.
10. Ensure no flammables within 5 metres of the job.
11. Screens to be used to prevent flying debris from hitting other workers. Where not practicable warn others and set up exclusion zone.
12. Hot works conducted outside of a designated hot work area will require a hot work permit. Check with you supervisor or site rep before commencing.
13. Faulty equipment must not be used. Tag it out and report it to your Supervisor.
14. When changing a disc the grinder must be isolated from the power source (e.g. power lead unplugged or battery removed).

#### 9" Angle Grinder

1. 5" or 7" Angle Grinders should be used in preference to 9" grinders. The use of 9" Angle Grinders must be authorised by the acting supervisor or site representative.
2. 9" Angle Grinders must be signed out prior to use and signed back upon completion.
3. Only experienced operators with an HVAC VOC permitted to operate a 9" Angle Grinder.

### OPERATIONAL SAFETY CHECKS

1. Set up and maintain a body position that ensures it is not placed in the line of fire e.g. clear from sparks, rotating disc, clear from direct line behind the cutting direction.
2. Ensure, where possible, work is positioned in the operator's best working zone – between shoulders and knees. NOTE: No grinding overhead
3. When wearing gloves, only close fitting gloves (cut resistant level 3-5) are permitted.
4. Safety glasses and full face shield (double eye protection) shall be worn at all times.
5. Ensure the guard covers half the disc between the operator and the spindle.
6. All leads kept clear of the grinding path and feet of operator.

7. All work pieces secured from movement. This includes materials located on work benches, pipe stands, trestles, cradles and rollers. Methods of securing materials can be achieved by clamping, tacking a work piece or where materials are large that their stability is good. In all cases you must also ensure that wastes/ off cuts are secured from falling.
8. Maintain complete control. Always operate with both hands. Maintain a proper & steady footing at all times.
9. Rotate tasks to reduce operator fatigue during lengthy tasks.
10. When grinding produces high dust levels, respiratory protection shall be worn. If grinding stainless steel or galvanised steel than a minimum P2 respirator with protection against thermally generated particles is required.
11. Allow the grinder to come to a complete stop before putting down.

## HOUSEKEEPING

1. All leads are to be rolled up and placed in the correct storage area.
2. Grinders shall be kept clean and stored in the correct storage area.
3. Leave the work area in a safe, clean and tidy state.

## POTENTIAL HAZARDS

- |                |                  |                   |               |
|----------------|------------------|-------------------|---------------|
| ▪ Entanglement | ▪ Falling Object | ▪ Cuts/ Abrasions | ▪ Trip Hazard |
| ▪ Kick-back    | ▪ Noise          | ▪ Sparks          | ▪ Electrical  |
| ▪ Hot Surface  | ▪ Dust           | ▪ Fire            | ▪             |

## REFERENCED MATERIAL

- ✓ AS1788:1987 Abrasive Wheels
- ✓ Guide to safeguarding common machinery and plant, WHS Queensland, version 3 2019

## CONSULTATION & REVIEW

Description	Originator	Reviewed	Approval
Review SOP-003 & 005 and consolidate into one SOP.	G Clarke	G Hildred	D McMahon

I confirm I have read, fully understand and will abide by the contents of this SOP

Name	Occupation	Signature	Date	Name	Occupation	Signature	Date