

METAL ANGLE-GRINDER .Hackspace risk assessment.

Creation Date	05/11/22
Operation / Task	Use of Angle Grinders
Location / Area	Metalwork area / Welding / Grinding area

S = Severity Rating	L = Likelihood	RR = Risk Rating								
1. Trivial	1. Unlikely occurrence	Severity	5	5	10	15	20	25	R	Unacceptable risk, plan out or add further controls
2. Minor Injury	2. Rare occurrence		4	4	8	12	16	20	O	Acceptable only if no other method viable and with high level controls in place
3. Over 3 day injury	3. Occasional occurrence		3	3	6	9	12	15	Y	Acceptable with suitable controls
4. Major Injury (RIDDOR)	4. Frequent occurrence		2	2	4	6	8	10	G	Acceptable, no further action required
5. Fatality	5. Often occurs		1	1	2	3	4	5		
			1	2	3	4	5			
			Likelihood							

Assesment

Activity & Risk	Who might be harmed and how?	Risk Rating			Responsibility	Control Measures
		S	L	IR		
Changing grinding, forming, polishing discs or wheels.	Operator and others within close vicinity. Equipment not isolated from electrical or air supply prior to disc or wheel change. Incorrect selection of appropriate disc or wheel for the rating of the machine. Disc or wheel not fitted properly and/or flange nut not located properly.	4	3	12	Operator	Portable tool is isolated from power supply prior to wheel / disc changing taking place and plug is to be kept adjacent to the operator to avoid accidental activation of machine during blade changing operation. Only skilled / competent personnel carry out wheel / disc changing.
Changing grinding, forming, polishing discs or wheels. (cont)	Damaged abrasive wheel fitted causing potential to "explode" off machine and cause injury.	4	3	12	Operator	If abrasive wheel is dropped it must be taken out of use and disposed of as wheel may be damaged but invisible to naked eye, causing wheel to 'explode' and cause injury
Grinding, Polishing and forming of materials and work pieces.	Operator and others within close vicinity. Contact with disc / entanglement. Causing Cuts, severe lacerations due to contact with grinding or cutting discs/ wheels.	2	3	6	Operator	Grinders only to be used by persons assessed as competent. Workpiece set firmly on work bench and held by clamps. Cuffs on work wear to be close fitting. Loose fitting or fabric type gloves that can be grabbed by wheel must be avoided. Suitable protective gloves to be worn at all times
Grinding, Polishing and forming of materials and work pieces.	Operator and others within close vicinity. Eye injuries caused by shattering discs or flying particles	3	3	9	Operator	Impact rated goggles to be worn during grinding, Note safety glasses do not offer adequate protection from flying sparks / particles Guard in place on grinders – not to be removed under any circumstances Ensure correct disc type selected for the task Discs to be mounted by competent persons only Wheels to be checked for wear and defects on a regular basis by a competent person
Grinding, Polishing and forming of materials and work pieces.	Operative Damage to hearing as noise may exceed 80dB (A) for short period of time when cutting, grinding or polishing.	2	3	6	Operator	Hearing protection to be worn at all times when grinding is being carried out.
Grinding, Polishing and forming of materials and work pieces.	Operator and others within close vicinity Dust / respiratory problems caused by exposure to silica dust if the material is stone or non metal	5	3	15	Operator	Dust Extraction system must be operated if operating on stone or any non metal material that could generate dust. Correct form of PPE / Dust mask should be worn if operating on stone or any non metal material that could generate dust.
Grinding, Polishing and forming of materials and work pieces.	Operator Risk of Hand Arm Vibration Syndrome if tools are used for prolonged periods	2	3	6	Operator	Ensure correct tool is selected for the task Where possible, the use of grinders shall be avoided e.g. cutting carried out by saw or CNC machine
Grinding, Polishing and forming of materials and work pieces.	Operator Risk of electrocution	3	3	9	Operator	Grinder should be attached to a mains socket that is protected via an RCD Faulty or damaged equipment to be removed from use and reported - to be then disposed of or repaired/replaced