

RISK ASSESSMENT – Use of Grinders



Creation Date	14.02.17	RA No	Review Date	Reviewer	Review Date	Reviewer
Operation / Task	Use of Grinders	GR.1.RA	05.02.18	Sarah Caruso	01.02.19	Sarah Caruso
Location / Area	Workshop Area / Installation Site		No changes required		No changes required	

S = Severity Rating	L = Likelihood	RR = Risk Rating							
1. Trivial	1. Unlikely occurrence	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							

Activity & Risk	Who might be harmed and how?	Risk Rating			Control Measures	Residual Risk			Responsibility
		S	L	IR		S	L	RR	
Changing grinding, forming, polishing discs or wheels.	<p>Operator and others within close vicinity.</p> <p>Equipment not isolated from electrical or air supply prior to disc or wheel change.</p> <p>Incorrect selection of appropriate disc or wheel for the rating of the machine.</p> <p>Disc or wheel not fitted properly and/or flange nut not located properly.</p>	4	3	12	<ul style="list-style-type: none"> 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. All staff are trained and certified in wheel and disc changing. Only skilled / competent personnel carry out wheel / disc changing. 	4	1	4	<p>Masons</p> <p>Installers</p> <p>Workshop Manager</p> <p>Installations Manager</p>

RISK ASSESSMENT – Use of Grinders

<p>Changing grinding, forming, polishing discs or wheels. (cont)</p>	<p>Damaged abrasive wheel fitted causing potential to 'explode' off machine and cause injury.</p>	4	3	12	<ul style="list-style-type: none"> 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. 	4	1	4	<p>Masons Installers Workshop Manager Installations Manager</p>
<p>Grinding. Polishing and forming of materials and work pieces.</p>	<p>Operator and others within close vicinity. Contact with disc / entanglement. Causing Cuts, severe lacerations due to contact with grinding or cutting discs/ wheels.</p>	2	3	6	<ul style="list-style-type: none"> Grinders only to be used by persons assessed as competent and suitably trained Pieces of stone 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 	2	2	4	<p>Masons Installers Workshop Manager Installations Manager</p>
<p>Grinding. Polishing and forming of materials and work pieces.</p>	<p>Operator and others within close vicinity. Eye injuries caused by shattering discs or flying particles</p>	3	3	9	<ul style="list-style-type: none"> 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 trained and certified personnel only Wheels to be checked for wear and defects on a regular basis by a competent person 	3	1	3	<p>Masons Installers Workshop Manager Installations Manager</p>

RISK ASSESSMENT – Use of Grinders

Grinding. Polishing and forming of materials and work pieces.	Operative Damage to hearing as noise may exceed 80dB (A) for short period of time qwhen cutting, grinding or polishing.	2	3	6	<ul style="list-style-type: none"> • Hearing protection provided to employees BS EN352 • Hearing protection to be worn at all times when grinding is being carried out. • Zone is indicated as a mandatory hearing protection zone • Review noise survey carried out on the workshop and repeat if necessary • Consider implementing health surveillance in the form of audiometry testing • Suitable facilities are provided for PPE to be stored away from the workplace and kept clean, staff are advised to use 	2	1	2	Masons Installers Workshop Manager Installations Manager
Grinding. Polishing and forming of materials and work pieces.	Operator and others within close vicinity Dust / respiratory problems caused by Exposure to silica dust	5	3	15	<ul style="list-style-type: none"> • Dust Extraction system must be operating before any machining takes place. • RPE provided, face fit tested and worn. • Excess dust to be cleared on a regular basis – NOT swept. Dust should be hosed down and swept wet or vacuumed using an industrial dust extraction system fitted with HEPA Filter. • Operatives are trained on the inspection and replacement of filters on RPE • Document inspections on correct functioning of RPE • It is recommended that an adequate LEV system is installed in order to adequately reduce dust close to the source as well as filtrate dust and avoid expelling directly into the atmosphere • Employees to be provided with uniform and facilities to store clothes to eliminate covering their own clothes in dust and spreading dust • Employees are advised to change into own clothes before leaving premises to avoid spreading dust in own vehicles. 	5	1	5	Masons Installers Workshop Manager Installations Manager

RISK ASSESSMENT – Use of Grinders

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	<ul style="list-style-type: none"> • 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 • Job rotation to be introduced where possible. • Regular inspections and maintenance of grinders to be carried out to limit enhancement of vibration due to loose components or ill-maintained equipment • All employees complete vibration medical questionnaire on a regular basis and results are reviewed to monitor changes • Exact vibration levels in m/s² are recorded and displayed – Staff have been informed to monitor time on vibrating tools and ensure levels are not exceeded daily. • Look to source the latest and lowest emitting vibratory equipment available • As per findings of health questionnaire and levels of exposure further health surveillance may be required with the assistance of an occupational health nurse 	2	2	4	<p>Masons</p> <p>Installers</p> <p>Workshop Manager</p> <p>Installations Manager</p>
Grinding. Polishing and forming of materials and work pieces.	Operator Risk of electrocution	3	3	9	<ul style="list-style-type: none"> • Where possible, only 110v equipment to be used • Where 240v used, RCD should be fitted • Regular inspections of cabling and casings • Faulty or damaged equipment to be removed from use and reported - to be then disposed of or repaired/replaced • Under no circumstances are employees to attempt to repair electrical items. Only competent persons to do so. • Ensure electrical installation is inspected at 5 yearly intervals • Regular work equipment inspections are carried out and findings recorded. • All portable appliances are PAT tested yearly 	3	1	3	<p>Masons</p> <p>Installers</p> <p>Workshop Manager</p> <p>Installations Manager</p>