

Reference Number	TSR/RA/006
Implementation Date	03.12.2018
Revision Number	0
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**TASK SPECIFIC RISK ASSESSMENT
GRINDING OPERATIONS**



Hazard, Risk, Environmental & Ergonomical Assessment

Contract Name	Task to be Performed	
List Risk Assessment Team Names	Training Required	Risk Assessment No. TSR/RA.006
	General Induction	Revision No. 0
	HIRA	Date of original issue
	Toolbox Talks	Date revised
	Grinding training	Number Of employees

Assessment Matrix

Probability of Occurrence (P)	INJURY SEVERITY POTENTIAL (IS)	DAMAGE / LOSS SEVERITY (DS)	DURATION OF EXPOSURE (ED)	ENVIRONMENT (E)	HEALTH (H)	Probability of Occurrence (P)	INJURY SEVERITY POTENTIAL (IS)	DAMAGE / LOSS SEVERITY (DS)	DURATION OF EXPOSURE (ED)	ERGONOMICS / ENVIRONMENT (E)	HEALTH (H)	Consequence (C)
Common Occurrence	Multiple Fatalities OR PERMANENT DISABILITIES	More than R 1 500 000	1<10> Days	Irreversible damage and/or permanent impact / National level/legal prosecution	Multiple fatalities	5	5	5	5	5	5	30
Has Happened before	Fatal / Permanent Disability	R 300 000 to R 1 500 000	6<10> Hours	Potential reversible long term damage and /Regional/Major fine	Fatality	4	4	4	4	4	4	24
Could Occur	Moderate / Serious Injury	R 150 000 to R 300 000	3<6> Hours	Long term eco disturbance and/or significant impact on local community/legal notice/minor fine	Unconsciousness; Permanent physical defect arising from an occupational illness; Any incident reportable to the relevant authorities Lost workday case(LWC); A confirmed occupational illness, resulting in loss by the person of one to 13 days; Restricted workday case(RWC); An occupational illness requiring removal from normal work duties, (Includes removal on medical grounds, such as due to biological monitoring. Person may perform alternative work.	3	3	3	3	3	3	21
Not likely	Lost Time Injury	R 15 000 to R 150 000	1<3> Hour	Short term and/or restricted disturbance and/or impact on the community.	More than Minor Illness Case (MIC)	2	2	2	2	2	2	12
Practically Impossible	Minor injury – No Lost Time	Less than R 15 000	< 1 Hour	Ecological stress and /or nuisance to community.	Minor Illness Case (MIC): A disorder which only requires attention such as increased biological monitoring. Person can continue with his normal work.	1	1	1	1	1	1	6

Task Steps	CURRENT RISK									REMEDIAL	RESIDUAL							ACTION	
	HAZARD IDENTIFIED	RISK ASSOCIATED WITH HAZARD	P	IS	DS	ED	E	H	C	HOW IS HAZARD TO BE DEALT WITH	P	IS	DS	D	E	H	C	BY WHOM	DATE
Use of angle grinders.	Inspection not done on grinder	Can lead to injuries, equipment damage and disability	3	2	2	1	2	1	11	Inspection to be done by a competent person. User of the grinder to be trained on how to do the pre use inspection and the use thereof. Inspection registers to be signed off by a competent supervisor.	2	1	1	1	1	1	7		
	Grinder Register not filled in.	Can lead to injuries, equipment damage	3	3	2	1	3	1	13	Foreman to sign off the inspection register. Site HSE officer to do spot checks on the registers. Register to be filled prior to grinder leaving store.	2	1	1	1	1	1	7		
	Grinder not made safe – not plugged out	Can lead to injuries, equipment damage and disability .	3	3	3	2	3	1	15	Only a trained person is allowed to change the disk on a grinder. Disks that get wet or lay in water may not be used. User to ensure that the grinder is plugged out. Also ensure disk has not expired and correct disk is fitted for correct application.	2	1	1	1	1	1	7		
	Incorrect tools used to change the grinder disk	Can lead to injuries and minor equipment damage.	3	3	2	1	3	1	13	Only trained, appointed and competent person to change the disc on the grinder.	2	1	1	1	1	1	7		
	Incorrect grinder disk fitted	Can lead to injuries, minor equipment damage and disability .	3	3	2	1	3	1	13	Only a trained and competent person to change the disc on the grinder. Supervisor to ensure that the correct disc is provided and fitted. Ensure correct disk is fitted for the correct application	2	1	1	1	1	1	7		
	Grinder disk fitted the wrong way round	Can lead to injuries equipment damage and disability .	3	2	2	1	2	1	11	Only a trained and competent person to change the disc on the grinder. Supervisor to inspect the grinder after fitment of the disc.	2	1	1	1	1	1	7		
	Damaged grinder disk fitted	Can lead to injuries, equipment damage, and disability effect.	3	3	2	1	3	1	13	Disc to be inspected by the supervisor before fitment. This task is to be done by a trained and competent person. No damaged disks may be used at any time. Discard of damaged disks in the correct manner	2	1	1	1	1	1	7		
	Grinder safety guard not in place	Can cause injuries, equipment damage and disability effect.	3	3	2	1	3	1	13	Grinder to be inspected before use by a trained and competent person. The Mine's procedure to be communicated and signed for by all operators. Only to be used by a competent, trained and appointed operator.	2	1	1	1	1	1	7		

Cutting of steel incorrectly	Can cause injuries and disability .	3	3	2	1	3	1	13	Grinder to be used by a trained and competent person. The steel is to be placed on a level area in order to prevent any possible damage to the cutting disc. The steel should not be supported by means of holding it in ones hands. No unnecessary people to be allowed in the area where cutting will take place. Ensure fire extinguisher is close by and available.	2	1	1	1	1	1	7		
Grinding sparks entering eyes	Can cause eye injuries and disability effect.	3	3	2	1	3	1	13	Double eye protection to be used – safety glasses and face shield. Assistants to make use of eye protection as well. When spark enters eye seek immediate medical treatment	2	1	1	1	1	1	7		
Dust inhalation	Can cause serious lung disease and permanent disability.	3	3	2	1	3	1	13	User of grinder to make use of a dust mask. Task to be supervised by a competent supervisor.	2	1	1	1	1	1	7		
Noise	Can cause permanent disability	3	2	1	1	3	1	11	When the grinder is used – use ear protection. Avoid using grinder in a confined space or in closed area. Use the correct ear protection for the decibels being generated	2	1	1	1	1	1	7		
Grinder used by incompetent employee	Can result in injuries, equipment damage and disability.	3	3	2	1	3	1	13	Only trained , competent and appointed employees are allowed to work with a grinder. Grinder not to be left unsupervised. Task to be supervised by a competent supervisor.	2	1	1	1	1	1	7		
Disk coming off while cutting	Can cause injuries, equipment damage and disability.	3	3	3	2	3	1	15	Grinder to be inspected before use by a trained and competent person. Inspection registers to be signed off by the responsible supervisor. Grinder to be re-inspected after fitment of disks.	2	1	1	1	1	1	7		
Employee dropping grinder	Can cause an injury, equipment damage and disability.	3	3	2	1	3	1	13	Only trained and competent person are allowed to work with a grinder. No horse play allowed while working with the grinder. Grinder may only be put down when the disc has stopped turning.	2	1	1	1	1	1	7		
Employee being shocked by defective equipment	Can cause injury and disability.	3	3	2	1	3	1	13	Grinder not to be used while standing in the water. No work to be done in the rain, grinder to be inspected before use and grinder with poor connections and cables to be removed from site.	2	1	1	1	1	1	7		
Employee using wrong disk for the wrong application	Can cause injury and disability.	3	2	2	1	2	1	11	Only trained and competent employees to work with grinder, task to be supervised by a competent supervisor.	2	1	1	1	1	1	7		