The purpose of a risk assessment?

- 1. To find out how the hazard could hurt, kill or make people unwell (harm)?
- 2. To work out what is the chance of harm occurring?
- 3. To work our how to prevent the hazard from harming people?
- 4. And without waiting for someone to be harmed, how will I know I have done enough?

How to undertake a machinery risk assessment?

The following 5 steps are to be done to complete a risk assessment worksheet.



Likely harm to the worker from the hazard (H)

Type of harm	Score
Scratch / Bruise	0.25
Laceration / cut / mild ill health effect/ minor burns	0.5
Fracture minor bone – fingers, toes	3
Fracture major bone – hand, arm, leg	5
Loss of 1 or 2 fingers/ toes or major burns	8
Leg / hand amputation, partial loss of hearing or eye	11
Amputation of 2 legs/hands, total loss of hearing/sight in both	15
ears/eyes	
Critical injuries or permanent illness/condition/injury	25
Single Fatality	40
Multiple fatalities	65

How often are people exposed to the hazard (E)

Exposure Rate	Score
Annually	0.5
Monthly	1
Weekly	2
Daily	3
Hourly	4
All the time	5

Could the worker avoid the hazard in an event (A)

Possibility of Avoidance	Score
Possible	0.75
Possible under certain circumstances	2.5
Not possible	5

What is the likelihood of hazardous event occurring (L)

Likelihood of hazardous event	Score
Almost impossible	0.05
Unlikely	1.25
Possible	2.5
Probable	4
Certain	6

RISK SCORE = H x E x A x L

Hierarchy of controls (control type) to reduce risk of harm to people

Select and implement controls measures as per the order in the list. The hazard must be eliminated so far as is reasonably practicable. If you can't eliminate, the hazard must be minimised (reduce the risk) following the specific order of:



Determine action

Based on the controlled risk score/level, the following actions or approval is required.

Risk Level	Approval required by	Action to be taken
Critical (>500)		Risk reduction measures should be implemented immediately, corporate management should be notified. Discontinue use of machine is advised.
High (161-500)		Potentially dangerous hazard, which requires risk reduction measures to be implemented urgently. Use of machine should be discontinued until additional controls implemented.
Medium (46-160)		The risk associated with the hazard is substantial enough to require risk reduction measures. These measures should be implemented at the next suitable opportunity.
Low (1-45)		Risk to health and safety is present, but low. Risk reduction measures must be considered.

Risk Assessment Reference:		Date:	Version No.:		Review Date:	
PART A: ENTER INFORMATION ABOUT THE RISK	ASSESSMENT LOCATION	AND THE PEO	OPLE COMPLETING TH	E RISK ASSESSI	MENT	
Location name:	Branch:		Date:	Assessed by:		H&S Representative:
PART B: ENTER INFORMATION ABOUT THE MACH	INE					
Machine name:	Date of manufacture:		Serial Number:	Safety Markings	5:	Machine label information:
Machine Overview: (What does it do)						
PART C: SYSTEM AND PROCESS INFORMATION						
Does the user/operator require a license or compet	ency?					
Current safe systems of work for the machine being	assessed? Eg.					
Training	SOPs					
Manufacturer's information and instructions JSA/SWMS/PTW						
Inspections/Audits	Signage					
Past experiences with the machine that may assist	in the assessment? Eg					
Existing controls SOPs	Standards					
Industry standards Incidents & near-hits	Legislation					
Regulations Codes practice	Good practice					
Training material Incident investigations	Industry info					
Have you considered?						
Non-routine activities such as maintenance, repair, c	r cleaning.					
• The way the work is organised, layed out or done.						
 Risks to contractors, visitors, public, young or inexperval. volunteers, persons with limited work training, knowledge 	rienced workers, ge or abilities.					
Current first aid/emergency requirements for the m	achine? Eg:					
Additional first aid kit contents Emergency show						
Emergency eyewash Spill kit	 Communications 					
Decontamination system Recovery respon						
Current PPE used when working on the machine? I	ig:	Type of protect	ion and purpose:			
Eye Protection Face Protection	Hand Protection					
Body Protection Head Protection	Foot Protection					

IDENTIFY HAZARDS AND ASSOCIATED RISK SCORES AND CONTROLS								
Step 1: Hazard/Risk description	Step 2: Risk score/level as seen	Comments (when and where hazard is present)	Step 3: Control description (Current & Proposed)	Control Type EL,S,I,EN, A,P	Step 4: Estimate risk score/level after controls	Step 5: Reduction in risk %		
	H = E = A = L = Score = Level =		Current: Proposed:		H = E = A = L = Score = Level =			

Step 1: Hazard/Risk description	Step 2: Risk score/level as seen	Comments (when and where hazard is present)	Step 3: Control description (Current & Proposed)	Control Type EL,S,I,EN, A,P	Step 4: Estimate risk score/level after controls	Step 5: Reduction in risk %
	H =		Current:		H =	
	E =				E =	
	A =				A =	
	L =				L =	
	Score =				Score =	
	Level =				Level =	
			Proposed:			

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	H =		Current:		H =	
	E =				E =	
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	L =				L =	
	Score =				Score =	
	Level =				Level =	
			Proposed:			

SUMMARY OF RISK ASSESSMENT						
Description of the machinerye that has been assessed.	Total number of hazards and risks	Number of Critical Risk(s)	Number of High Risk(s)	Number of Medium Risk(s)	Number of Low Risk(s)	Total risk reduced by

RECORD OF ENGAGEMENT AND PARTICIPATION						
Determine the person responsible for reviewing and implementing the risk assessment including the identified controls.						
Record below the names of the persons or parties consulted.						
Management representative		H&S Representative/Employee representative				
Employee(s)		Employee(s)				
Employee(s)		Employee(s)				
Employee(s)		Employee(s)				
Experts(s)		Experts(s)				
Person Responsible for implementation or escalation						
Any additional comments or actions.						