



Computer Numerical Control (Cr	nc) Operation SAFE WOR	K METHOD STATEMENT (SW	/MS)
TASK OR ACTIV	ITY: Computer Numerical Contro	l (Cnc) Operation	
Business Name:		ABN:	SWMS#
Business Address:			
Contact Person:	Phone:	E fil:	
THIS SAFE WORK METHOD	STATEMENT IS APPROVED BY	THE PCL OF THE ROJECT	
Under the Work Health and Safety Regulation (WHS Regulation), a person conduct the proposed work starts.	cting a business or under the (PC 1) is	required to en ethat a safe work method s	statement (SWMS) is prepared before
Full Name:			
Signature:		Title:	Date:
Details of the person(s) responsible for ensuring implementation, monitoring	apliance the VMS a vell as review	es and modifications of the SWMS.	
Full Name:		Title:	Phone:
ALL PERSONNEL PARTICIPATING IN ANY ACTIVITY ON THIS S /MS M HAVE THE FOLLOWING COMMUNICATED	NA, 2 OF ALL RELEVANT PERSONNI EVELOPMENT AND APPROVAL OF	EL WHO HAVE BEEN CONSULTED AND CO	OMMUNICATED TO IN THE
Safety meetings or toolbox talks will be sched ed in accomply with gislative requirements to first identify any site hazards, hazards and then to further take steps to either eliminate or continuate hazard.			
If an incident or a near miss occurs, all work must sto, an atately. Depending on the severity of the incident, a meeting will be called with all workers to amend the SWMS if required. The meeting may also be an educational opportunity.			
Any changes made to the SWMS after an incident or a near miss must be approved by the Person Conducting Business or Undertaking and communicated to all relevant personnel.			
The SWMS must be kept and be available for inspection at least until the work is completed. Where a SWMS is revised, all versions should be kept. If a notifiable incident occurs in relation to which the SWMS relates, then the SWMS must be kept for at least two years from the occurrence of the notifiable incident.			

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CLIENT OR PRINCIPAL	CONTRACTOR DETAILS
Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date SWMS supplied to Project Manager:	
ANY HIGH BIOK CONSTRUCTOR	NAME OF THE POLIT
ANY HIGH-RISK CONSTRUCTOR	N WC & BEIN C ARIED OUT
☐ involves a risk of a person falling more than 2 meters	is carried out on or near pressurised gas mains or piping
☐ is carried out on a telecommunication tower	carried out on or near chemical, fuel or refrigerant lines
☐ involves demolition of an element of a structure that is load-bearing	\square is carried out on or near energised electrical installations or services
☐ involves demolition of an element related to the physical integral of a functure	☐ is carried out in an area that may have a contaminated or flammable atmosphere
☐ involves, or is likely to involve, disturbing asb	☐ involves tilt-up or precast concrete
☐ involves structural alteration or repair that —quires term — v sup —rt to prevent collapse	☐ is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor
☐ is carried out in or near a confined space	☐ is carried out in an area of a workplace where there is any movement of powered mobile plant
☐ is carried out in/near a shaft or trench deeper that. tunnel involving use of explosives	☐ is carried out in areas with artificial extremes of temperature.
\square is carried out in or near water or other liquid that involves a risk of drowning.	☐ involves diving work.
ANY HIGH-RISK MACHINER	Y OR EQUIPMENT NEARBY

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RISK MATRIX											
LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION	HEI	RARCHY OF CONTROLS		
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE	SCORE	SCORE ACTION	SCORE ACTION		Elimination Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCE		Substitution		
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before work starts.		Replace the hazard.		
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.	Isolate	e People from the hazard		
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	nitor and		Engineering Isolate the hazard.		
is the second m	Administrative Change the second most effective method of controlling a hazard. Engineering by isolation is the life post effective work is the fourth most effective method. PPE (Personal Protective Equipment), the least effective										

				PERS		TIVE EQUIPM					
		Select the app	ropriate PPŁ	abo v uitab	cor the equi	pment used or	the job task	being perforr	ned (if applica	ıble).	
FOOT PROTECTION	HAND PROTECTION	HEAD PROTECTION	HEARING ETION	P ECTION	PROTECTION	FACE PROTECTION	HIGH-VIS CLOTHING	PROTECTIVE CLOTHING	FALL PROTECTION	SUN PROTECTION	HAIR/JEWELLERY SECURED
Other PPE R	equired:										
	Pe	ermit or Licen	ses Requirem	ents		Mandatory Qualifications and Training					



JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
1. Preparation	Potential ergonomic issues, faulty equipment	ЗН	 Conduct a pre-operation inspection to identic and rectify any faulty equipment before starting. Implement a regular maintenance schedule or all CN machinery to prevent breakdowns and equipment faults. Provide ergonomic assessments and adjust wore tation set to do suit individual operator needs, reducing potential strain. Use adjustable of the convolved inches to support good posture and minimise ergonomic risks. Encourage conators to take regular breaks to aduce fatigue and strain injuries during long operation periods. Train coperators of woper lifting techniques when handling materials or equipment to avoid strain. Supply conal projective equipment (PPE) such as gloves and safety glasses in case of unexpected mishap. Ensure idequate lighting at the workstation to reduce eye strain and potential errors. Enblish clear pathways and keep the area around the CNC machine free of obstructions to prevent tripping cards. Install emergency stop buttons within easy reach of operators for quick response to any malfunctions. Use anti-fatigue mats for standing operators to alleviate leg and back discomfort. Initiate a reporting system for any ergonomic issues or equipment faults to be addressed promptly. Limit shift durations for CNC operators to ensure they are not overworked and remain alert. 	2M
2. CNC Machine Setup	Electric shock, injuries due to improper fixing of the workpiece	4A	 Conduct a pre-operational safety inspection of the CNC machine to identify any electrical hazards or faulty components. Ensure all electrical panels and connections are properly insulated and fitted with protective covers to prevent accidental contact. Verify that the CNC machine is properly grounded to reduce the risk of electric shock. Provide adequate personal protective equipment (PPE), such as insulated gloves and non-conductive footwear, for operators working near electrical components. Implement a lockout/tagout procedure to ensure the CNC machine is de-energised during setup and maintenance tasks. Ensure the workpiece is securely clamped or fixed in place using appropriate fixtures before starting the machine to prevent movement during operation. Train operators on the correct methods for aligning and securing workpieces to avoid injuries from improper fixing. 	ЗН



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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
			- Use only manufacturer-recommended tooling and clamps to ensure proper fit and security of the workpiece.	
			- Install emergency stop buttons and other safety deces on the CNC machine to allow for quick shutdown in case of an emergency.	
			- Ensure clear and visible signage around a CNC mach indicating potential electrical hazards and the need for proper PPE.	
			- Regularly inspect and maintain the CNC mach and its electrical systems to ensure optimal working condition and safety compliance.	
			- Limit access to the area aroung the CNC machine provised personnel only, reducing the risk of injury from machine personnel only, reducing the risk of injury from machine personnel only.	
			- Implements emprehens training program of CNC machine operators, focusing on safe setup procedures, he and recognish, and emprehens protected.	
			- Ensure person (involved in programming are adequately trained and competent in CNC programming techniques.	
			- Implement a puble-couck system where another qualified individual reviews the programmed tructions before running the machine.	
			- Utime seculation software to test and verify CNC programs before actual machine operation to detect my pote.	
		3H	- vide ergonomic workstations with adjustable chairs and desks to minimise strain during prolonged computer use for programming tasks.	
			- Encourage regular breaks to reduce the risk of repetitive strain injury; promote the 20-20-20 rule (every 20 minutes, look at something 20 feet away for 20 seconds).	
3. Programming	Improper programming using to machine errors, Repetitive strain injury		- Use wrist supports or ergonomic keyboards and mice to help maintain appropriate hand positioning while using computers.	1L
	from prolonged computer use		- Install proper lighting to reduce glare on computer screens, reducing eye strain during long programming sessions.	
			- Develop thorough and clear documentation and procedural guides for CNC programming to ensure consistency and reduce the likelihood of errors.	
			- Implement version control for CNC programs to track changes and revert to previous versions if issues are detected.	
			- Conduct regular maintenance and updates on programming software and computer systems to prevent technical malfunctions.	
			- Use task management techniques to distribute programming tasks evenly, preventing excessive workload on a single individual.	
			- Conduct hazard identification and risk assessment prior to starting new programming projects to adapt controls appropriately.	



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			- Ensure programmers are familiar with emergency stop functions and procedures in case immediate cessation of machine operation is required.	
			- Provide training on recognising symptoms of report estrain injury and encourage employees to report symptoms early to prevent escalation.	
4. Running the Programme	Machine error leading to potential injury, noise pollution causing hearing damage	2M		1L
5. Changing Tools	Hand injury whilst changing tools, Incorrect tool set up leading to machine damage	3Н		2M



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6. Material Insertion	Manual handling injuries, material fly g out during operation	4A		3H



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7. Operating the Machine	Inadvertent triggering of moving parts, formation of toxic fumes if incorrect materials used	3F.		1L
8. During Operation Monitoring	Health hazard due to prolonged exposure to noise, risk of eye injuries due to flying debris	2M		1L



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				1
9. Maintenance and Cleaning	Skin irritation from cleaning memicals, respiratory problems due to inhalation of dust	ЗН		1L



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10. Shutdown Procedure	Electric shock, Burns from hot components	ЗН		2M
11. CNC Troubleshooting	Comes in contact with sharp components, potential chemical hazards	2M		1L



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12. Material Removal after Fabrication	Eye injuries due to small particles, cuts or abrasions from sharp edges	2M		l 1L



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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
13. Disposal of Waste Material	Injury from inappropriate disposal, environmental harm from inappropriat waste disposal			2M
14. Inspection of Final Product	Potential for missed defect, potential ergonomic issues from handling	2M		1L



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15. Documentation and Reporting	Strain injuries from prolonged computer use, mental stress from excessive paperwork	2M		1L



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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
16. Emergency Procedure	Lack of knowledge could lead to injury, panic during emergency hight in that ase accident severity	3H		2M



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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
17. Machine Depower and Lockout	Electric shock, physical injury from improper lock-out	4A		3 H
18. Safety Inspections	Risk of missing a hazard, potential ergonomic issues from repeated movements	3H		2M



JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
19. Training and Equipment Familiarisation	Potential injury due to the miliarity, ergonomic issues are to inappropriate use	2M		1 1 1 1 1
20. Regular Health Checks	Long-term health effects due to exposure to CNC operations, psychological stress from work demands	2M		1L



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PECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDU. RISK



EMERGENCY RESPONSE - CALL 000 FOR EMERGENCIES

Ensure to have an Emergency Management Plan in place as well as adequate numbers of trained first aid staff with easy access to fully stocked first aid kits, rescue equipment, material safety data sheets, adequate access to emergency communication equipment and fire-fighting equipment suitable for all classes of fire and ignition sources.

LEGISLATIVE REFERENCES

RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISLATIVE REFERENCES. ANY STATE OF AT ARE NOT APPLICABLE.

Queensland & Australian Capital Territory

Work Health and Safety Act 2011

Work Health and Safety Regulations 2011

Legislation QLD: https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws Codes of Practice QLD: https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice

Legislation ACT: https://www.worksafe.act.gov.au/laws-and-compliance/acts-and-regulations

Codes of Practice ACT: https://www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice

New South Wales

Work Health and Safety Act 2011

Work Health and Safety Regulations 2017

Legislation NSW: https://www.safework.nsw.gov.au/legal-obligations/legislative

Codes of Practice NSW: https://www.safework.nsw.gov.au/resource-library/lis > odes-oi racti

Northern Territory

Work Health and Safety (National Uniform Legislation) Act 2011

Work Health and Safety (National Uniform Legislation) Regulation 201

Legislation NT: https://worksafe.nt.gov.au/laws-and-compliance/wo_place-

Codes of Practice NT: https://worksafe.nt.gov.au/f

South Australia

Work Health and Safety Act 2012 (SA)

Work Health and Safety Regulations 2012 (SA)

Legislation for SA: https://www.safework.sa.gov.au/resources/legislation

Codes of Practice for SA: https://www.safework.sa.gov.au/work_aces/codes-of-practice#COPs

Tasmania

Work Health and Safety Act 2012

Work Health and Safety (Transitional and Consequential Provisions) Act 2012

Work Health and Safety Regulations 2012

Work Health and Safety (Transitional) Regulations 2012

Legislation for TAS: https://worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations

Codes of Practice for TAS: https://worksafe.tas.gov.au/topics/laws-and-compliance/codes-of-practice

Details of permits, licenses or access required by regulatory bodies (add or delete as required):

- Permits from local council
- Authorisation to commence work
- Any required documents.

Victoria

Occupational Health al. Safety Act

Occupational Health and affety gulations 2017

Legis on VIC: https://www.csafe.vic.gov.au/occupational-health-and-safety-act-and-

gulat

des on actice VI autros://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice

Western Australia

Work Health and Safety Act 2020

Work Health and Safety Regulations 2022

Legislation Western Australia: https://www.commerce.wa.gov.au/worksafe/legislation

Codes of Practice WA: https://www.commerce.wa.gov.au/worksafe/codes-practice

Safe Work Australia Links

Law and Regulation (All States): https://www.safeworkaustralia.gov.au/law-and-regulation Model Codes of Practice: https://www.safeworkaustralia.gov.au/resources-publications/model-codes-of-practice

Model Codes of Practice

- Managing noise and preventing hearing loss at work
- Confined spaces
- Labelling of workplace hazardous chemicals
- Managing risks of hazardous chemicals in the workplace
- Welding processes
- First aid in the workplace
- Managing the risk of falls at workplaces
- Hazardous manual tasks
- Managing the risk of falls in housing construction
- Managing electrical risks in the workplace
- Demolition work
- Excavation work
- Work health and safety consultation, cooperation and coordination
- Managing the work environment and facilities
- How to manage work health and safety risks
- Managing risks of plant in the workplace
- Construction work





SIGNATORIES OF THE SAFE WORK METHOD STATEMENT

The signed and dated personnel listed below have cooperated in the consultation and development of this Safe Work Method Statement which has been approved by the Person/s Conducting a Business or Undertaking (PCBU). In signing this Safe Work Method Statement each individual acknowledges and confirms that they have read this SWMS in full, having raised any questions for items on this Safe Work Method Statement that require clarification, and confirms that they are competent, skilled and knowledgeable for the task assigned to them. Every person acknowledges that they have received the relevant training and qualifications where required, before carrying out any work contained in this Safe Work Method Statement. By signing this Safe Work Method Statement each individual agrees to work safely, to follow any safe work instructions which are provided, and agrees to use all Personal Protective Equipment where appropriate.

Worker Name	Signature	Date

SAFE WORK IN THE STATEMENT MONITORING AND REVIEW

The SWMS must be reviewed regularly to make sure it remains a fective of must be reviewed (and revised if necessary) if relevant control measures are revised. The view process should be carried out in consultation with workers (including contractors as support ractors of the SWMS and their health and safety representatives who represented that work group at the workplace.

When the SWMS has been revised the PCBU mast ensure that advised that a revision has been made and how they can access the revised SWMS, including all persons who will need to change a work procedure or system as a rest of the review are advised of the changes in a way that will enable them to implement their duties and the involved in the work must be provided with the relevant information and instruction that will assist them to understand and implement the revised SWMS.

The SWMS must be monitored regularly for the effectiveness of ensuring hazard controls are effective in reducing the risk of incidents, keeping the workplace safe for all personnel. The person responsible for monitoring the effectiveness of the Safe Work Method Statement should employ a multi-faceted approach which includes but is not limited to:

- Spot Checks.
- 2. Consultation with workers, contractors and sub-contractors.
- 3. Internal audits on a continual basis.

An approach of continuous improvement, promptly recording inconsistencies or deficiencies, followed up by immediate corrective action and consultation with all relevant personnel ensures that the PCBU is consistently developing ever-improving systems of safe work principles.

REVIEW NUMBER	1	2	3	4	5	6	7
NAME							
INITIALS							
DATE							

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SAFE WORK METHOD STATEMENT REVIEW CHECKLIST

This Safe Work Method Statement Review Checklist is to be followed and used upon initial development of the SWMS to help ensure that all steps have been adequately taken before work commences. Think of this document as an internal audit review checklist before commencing work, and may form part of a Toolbox Talk (safety meeting) and may be used as an opportunity for education and training.

ITEMS WHICH MUST BE INCLUDED IN THE SWMS	COMPLETED	COMMENTS
The company details have been entered, including the project name and address.		
All relevant personnel consulted during the development of the SWMS.		
Name, signature, position and date signed of the person approving the SWMS.		
Specific personnel and qualifications, experience is noted in the SWMS.	7	
Provides a step-by-step process of tasks required to carry out the activity or task.		
Adequate risk assessment of any identified hazards has been completed.		
Foreseeable hazards are identified and documented for each step.		
Any hazards listed in any site risk assessments have been added to the SWMS		
SWMS initial risk (IR) column as well as residual risk (RR) column pleted.		
Check control measures added to the SWMS are the most effective selections		
Responsible person is assigned and listed on the part the important control measures.		
Permit or licenses requirements specified, sur as Hot Work, Electric Work, Work at Heights etc.		
SWMS identifies plant and equipment to be us		
Details of inspection checks required for any equipment listed an inoted on the SWMS.		
Describes any mandatory qualifications, experience, and or skills required to perform the work.		
Applicable personal protective equipment is selected on the SWMS.		
Reflects and documents any legislative references and/or Australian Standards.		
Identifies any hazardous substances used with specific control measures in line with any SDS.		
REVIEWED BY	DATE REVIEWE	D
SIGNATURE	DATE COMPLET	ED