

## Cobot Welding | SAFE WORK METHOD STATEMENT (SWMS)

### TASK OR ACTIVITY: Cobot Welding

Business Name:

ABN:

SWMS#

Business Address:

Contact Person:

Phone:

Email:

### THIS SAFE WORK METHOD STATEMENT IS APPROVED BY THE PCBU OF THE PROJECT

Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a safe work method statement (SWMS) is prepared before the proposed work starts.

Full Name:

Signature:

Title:

Date:

Details of the person(s) responsible for ensuring implementation, monitoring and compliance of the SWMS as well as reviews and modifications of the SWMS.

Full Name:

Title:

Phone:

ALL PERSONNEL PARTICIPATING IN ANY ACTIVITY ON THIS SWMS MUST HAVE THE FOLLOWING COMMUNICATED

NAME OF ALL RELEVANT PERSONNEL WHO HAVE BEEN CONSULTED AND COMMUNICATED TO IN THE DEVELOPMENT AND APPROVAL OF THIS SWMS

Safety meetings or toolbox talks will be scheduled in accordance with legislative requirements to first identify any site hazards, then to communicate those hazards and then to further take steps to either eliminate or control each hazard.

If an incident or a near miss occurs, all work must stop immediately. 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.

## 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-RISK CONSTRUCTION WORK BEING CARRIED OUT

<input type="checkbox"/> involves a risk of a person falling more than 2 meters	<input type="checkbox"/> is carried out on or near pressurised gas mains or piping
<input type="checkbox"/> is carried out on a telecommunication tower	<input type="checkbox"/> is carried out on or near chemical, fuel or refrigerant lines
<input type="checkbox"/> involves demolition of an element of a structure that is load-bearing	<input type="checkbox"/> is carried out on or near energised electrical installations or services
<input type="checkbox"/> involves demolition of an element related to the physical integrity of a structure	<input type="checkbox"/> is carried out in an area that may have a contaminated or flammable atmosphere
<input type="checkbox"/> involves, or is likely to involve, disturbing asbestos	<input type="checkbox"/> involves tilt-up or precast concrete
<input type="checkbox"/> involves structural alteration or repair that requires temporary support to prevent collapse	<input type="checkbox"/> is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor
<input type="checkbox"/> is carried out in or near a confined space	<input type="checkbox"/> is carried out in an area of a workplace where there is any movement of powered mobile plant
<input type="checkbox"/> is carried out in/near a shaft or trench deeper than 2m or tunnel involving use of explosives	<input type="checkbox"/> is carried out in areas with artificial extremes of temperature.
<input type="checkbox"/> is carried out in or near water or other liquid that involves a risk of drowning.	<input type="checkbox"/> involves diving work.

## ANY HIGH-RISK MACHINERY OR EQUIPMENT NEARBY

RISK MATRIX									
LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION	HEIRARCHY OF CONTROLS	
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE			<p><b>Elimination</b> Remove the hazard.</p> <p><b>Substitution</b> Replace the hazard.</p> <p><b>Isolation</b> Isolate People from the hazard</p> <p><b>Engineering</b> Isolate the hazard.</p> <p><b>Administrative</b> Change the work.</p> <p><b>PPE</b></p>	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED		
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before work starts.		
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.		
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records		

**Notes on Hierarchy of Controls:** Elimination methods are the most effective and preferred when controlling a hazard. Substitution is the second most effective method of controlling a hazard. Engineering by isolation is the third most effective, while Administrative Controls by changing the work is the fourth most effective method. PPE (Personal Protective Equipment) is the least effective method.

PERSONAL PROTECTIVE EQUIPMENT (PPE)											
Select the appropriate PPE above suitable for the equipment used or the job task being performed (if applicable).											
FOOT PROTECTION	HAND PROTECTION	HEAD PROTECTION	HEARING PROTECTION	EYE PROTECTION	RESPIRATORY PROTECTION	FACE PROTECTION	HIGH-VIS CLOTHING	PROTECTIVE CLOTHING	FALL PROTECTION	SUN PROTECTION	HAIR/JEWELLERY SECURED
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other PPE Required:											
Permit or Licenses Requirements						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	Incorrect handling of materials, Unsecured work environment	3H	<p>Provide comprehensive training to all personnel on correct material handling techniques specific to the Cobot Welding Package.</p> <p>Utilise visual aids such as posters and instructional videos that demonstrate safe handling practices.</p> <p>Conduct regular safety briefings prior to shifts to reinforce material handling protocols.</p> <p>Ensure all materials are stored properly before and after use to prevent accidental spills or drops.</p> <p>Implement strict check-in and check-out system for material handling equipment.</p> <p>Secure all loose materials in the work environment to prevent them from causing trips or falls.</p> <p>Install barrier systems and safety signage around the work area to define clear operational boundaries.</p> <p>Conduct routine inspections of the work environment to ensure continuous compliance with safety standards.</p> <p>Provide easy access to emergency stop controls and other safety equipment for quick response in case of an incident.</p> <p>Establish clear pathways and keep them free from obstructions to ensure safe movement within the work environment.</p>	2M
2. Transporting Components	Collision during transportation, Dropping components	3H	<p>Ensure all components are securely fastened using appropriate straps, wraps, or containment measures before transport.</p> <p>Use transportation aids like trolleys, forklifts, or cranes that are suitable for the weight and size of the components.</p> <p>Train all personnel involved in the transportation of components on proper lifting and moving techniques.</p> <p>Mark all components with clear handling instructions, including weight and centre of gravity, to aid safe handling.</p> <p>Conduct pre-transport inspections to verify that all components are secured and the transport path is clear of obstacles.</p> <p>Limit transport speed within the facility to reduce the risk of collisions.</p> <p>Utilise spotters or guides when moving large or heavy components through tight spaces.</p> <p>Implement and enforce a strict no-lift policy for extremely heavy or awkward components, opting instead for mechanical assistance.</p> <p>Establish designated routes for transporting components to minimise interaction with regular workplace traffic and reduce collision risks.</p> <p>Provide and enforce the use of personal protective equipment such as gloves, safety shoes, and helmets during transportation activities.</p>	1L

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
3. Unpacking Cobot	Improper tool use, Falling objects	3H	<p>Provide specific training on unpacking procedures for Cobot systems to all personnel involved in the unpacking process.</p> <p>Utilize appropriate tools for opening packaging, such as safety cutters that minimize the risk of injury.</p> <p>Ensure that unpacking areas are clear of unnecessary personnel and obstacles to provide a safe working environment.</p> <p>Position unpacking stations near the installation area to reduce the need for further transportation of components.</p> <p>Use lifting aids like hoists or forklifts to handle heavy items during unpacking to prevent injuries from lifting.</p> <p>Ensure that unpacking materials are disposed of promptly and safely to prevent slips, trips, and falls.</p> <p>Implement a system to check all components for damage immediately upon unpacking to ensure that any issues are identified and addressed promptly.</p> <p>Provide clear instructions and labels on the packaging regarding the handling and storage of sensitive components.</p> <p>Conduct a brief safety review with all personnel after unpacking to address any immediate concerns or potential hazards observed during the process.</p>	2M
4. Installing Cobot	Electrical shock, Mechanical injury	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	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
5. Mounting Tilt-Turn Table	Crushing points, Device tipping	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	1L
6. Electrical Wiring	Electrical shock, Incorrect cabling	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	1L

complete setup

3H





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
10. Setting Safety Distances	Inadequate marking, Trip hazards	2M	<div>SAMPLE</div>	1L
11. Software Configuration	Programming errors, System compatibility issues	2M		1L

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
12. Operational Testing	Unexpected start, Lack of emergency stop	3H		1L
13. Handling Welded Pieces	Burns from hot surfaces, Contact with hot metal	3H		1L



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
15. Handling Backing Gas	Gas leaks, Improper handling	3H	1. Wear appropriate PPE including safety glasses, gloves, and a respirator. 2. Ensure all gas cylinders are properly secured and labeled. 3. Check for leaks before using the gas. 4. Use the gas in a well-ventilated area. 5. Follow the manufacturer's instructions for the gas. 6. Do not use the gas near open flames or sparks. 7. Keep the gas away from children and pets. 8. Store the gas in a cool, dry place. 9. Do not use the gas if you are pregnant or have a respiratory condition. 10. Dispose of the gas properly. 11. Wash your hands after handling the gas. 12. Do not eat or drink while handling the gas. 13. Do not use the gas in a confined space. 14. Do not use the gas near electrical equipment. 15. Do not use the gas near flammable materials.	2M
16. Final Inspection	Overlooked defects, Non-compliance with specs	2M	1. Check all dimensions and specifications. 2. Check for any defects or damage. 3. Check for any missing parts or components. 4. Check for any incorrect assembly or installation. 5. Check for any incorrect labeling or marking. 6. Check for any incorrect packaging or shipping. 7. Check for any incorrect documentation or paperwork. 8. Check for any incorrect invoicing or billing. 9. Check for any incorrect delivery or shipping. 10. Check for any incorrect customer service or support. 11. Check for any incorrect feedback or reviews. 12. Check for any incorrect social media or online presence. 13. Check for any incorrect website or app. 14. Check for any incorrect email or phone number. 15. Check for any incorrect address or location.	1L

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
17. Safety Training	Inadequate training, Misunderstanding of operational procedures	3H		2M
18. Establishing Work Zones	Inadequate barrier setup, Access by unauthorised personnel	3H		1L

Equipment, Training, Poor Practices

3H

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
20. Emergency Protocols	Delayed response, Ineffective emergency shutdown	4A		2M
21. Documentation and Compliance	Inaccurate records, Non-compliance with safety standards	2M		1L

[illegible]



## 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 REFERENCE IN ANY STATE THAT 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>

### Victoria

Occupational Health and Safety Act 2004

Occupational Health and Safety Regulations 2017

Legislation VIC: <https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations>

Codes of Practice VIC: <https://www.worksafe.vic.gov.au/compliance-codes-and-codes-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/legislation>

Codes of Practice NSW: <https://www.safework.nsw.gov.au/resource-library/codes-of-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>

### Northern Territory

Work Health and Safety (National Uniform Legislation) Act 2011

Work Health and Safety (National Uniform Legislation) Regulations 2012

Legislation NT: <https://www.worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws>

Codes of Practice NT: <https://www.worksafe.nt.gov.au/laws-and-compliance/codes-of-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

### 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/workplaces/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://www.worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations>

Codes of Practice for TAS: <https://www.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.

## 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 METHOD STATEMENT MONITORING AND REVIEW

**The SWMS must be reviewed regularly** to make sure it remains effective and must be reviewed (and revised if necessary) if relevant control measures are revised. The review must be carried out in consultation with workers (including contractors and sub-contractors) who may be affected by the operation 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 must ensure that all persons involved with the work are 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 result of the review are advised of the changes in a way that will enable them to implement their duties consistently with the revised SWMS. All workers that will be 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:

1. 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							

### 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.	<input checked="" type="checkbox"/>	
All relevant personnel consulted during the development of the SWMS.	<input checked="" type="checkbox"/>	
Name, signature, position and date signed of the person approving the SWMS.	<input type="checkbox"/>	
Specific personnel and qualifications, experience is noted in the SWMS.	<input checked="" type="checkbox"/>	
Provides a step-by-step process of tasks required to carry out the activity or task.	<input checked="" type="checkbox"/>	
Adequate risk assessment of any identified hazards has been completed.	<input checked="" type="checkbox"/>	
Foreseeable hazards are identified and documented for each step.	<input checked="" type="checkbox"/>	
Any hazards listed in any site risk assessments have been added to the SWMS.	<input checked="" type="checkbox"/>	
SWMS initial risk (IR) column as well as residual risk (RR) column completed.	<input checked="" type="checkbox"/>	
Check control measures added to the SWMS are the most effective solutions.	<input checked="" type="checkbox"/>	
Responsible person is assigned and listed on the SWMS for the implementation of control measures.	<input checked="" type="checkbox"/>	
Permit or licenses requirements specified, such as Hot Work, Electrical Work, Work at Heights etc.	<input checked="" type="checkbox"/>	
SWMS identifies plant and equipment to be used.	<input checked="" type="checkbox"/>	
Details of inspection checks required for any equipment listed are noted on the SWMS.	<input checked="" type="checkbox"/>	
Describes any mandatory qualifications, experience, training or skills required to perform the work.	<input checked="" type="checkbox"/>	
Applicable personal protective equipment is selected on the SWMS.	<input checked="" type="checkbox"/>	
Reflects and documents any legislative references and/or Australian Standards.	<input checked="" type="checkbox"/>	
Identifies any hazardous substances used with specific control measures in line with any SDS.	<input checked="" type="checkbox"/>	
REVIEWED BY		
SIGNATURE		
DATE REVIEWED		
DATE COMPLETED		