

## Metal Shielded Metal Arc Welding Machine | SAFE WORK METHOD STATEMENT (SWMS)

### TASK OR ACTIVITY: Metal Shielded Metal Arc Welding Machine

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 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

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.

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

### 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	Improper setup, Insufficient personal protective equipment (PPE)	3H	<ul style="list-style-type: none"> <li>- Ensure the welding machine set-up is done according to manufacturer's guidelines by a trained professional.</li> <li>- Conduct regular maintenance and inspection of equipment for any potential faults or wear &amp; tear.</li> <li>- Use insulating mats during the setup process to prevent the risk of electric shocks.</li> <li>- The worker performing the work should be fully trained in welding safety, with training updated on a regular basis.</li> <li>- Workers should always use Personal Protective Equipment (PPE) compliant with Australian standards, including welding helmets with correct shade of filter lens, flame-resistant clothing, safety shoes, gloves and ear protection.</li> <li>- Carry out sufficient risk assessment before undertaking any welding operation to identify potential hazards and ways to mitigate them.</li> <li>- Ensure that a spotter / standby person is present during welding operations. This person should be equipped with fire extinguishing materials and be trained to use them.</li> <li>- Adequate ventilation is necessary. If work occurs indoors, fume extraction systems should be utilised to get rid of harmful gases and particles.</li> <li>- Immediate area around the weld must be free from flammable substances.</li> <li>- Electrical components of the equipment should be properly grounded.</li> <li>- Only use equipment that has been regularly tested and tagged according to Australian workplace regulations.</li> <li>- Regular breaks should be encouraged to avoid eye fatigue and other health complications that can occur as a result of prolonged exposure to welding arcs.</li> </ul>	2M
2. Equipment Inspection	Faulty equipment, Electrical hazards	3H	<ul style="list-style-type: none"> <li>- Ensure all welding equipment is inspected and tested by a qualified professional prior to use. Any faulty items should be immediately reported and removed from use.</li> <li>- Regularly inspect power cords, plugs and sockets for any sign of damage or wear and tear. Replace any damaged components immediately.</li> <li>- Always use equipment with an automatic shut-off system in the event of a power surge or overheating.</li> <li>- Utilise appropriate safety gear such as welding masks, gloves, aprons and boots, to reduce exposure to electrical hazards.</li> <li>- Always use welding machines on dry ground conditions to avoid any instances of electrical shock or electrocution.</li> <li>- To mitigate the risk of fire, ensure there are no flammable materials near the work zone.</li> <li>- Avoid using welding equipment near water sources or damp areas that may potentially conduct electricity.</li> </ul>	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
			<ul style="list-style-type: none"> <li>- Establish a detailed checklist to be used prior to operation. This should involve verifying that all safety features are functioning properly.</li> <li>- Ensure employees have undergone appropriate training on the safe use of the equipment, including what to do in case of emergencies or accidents.</li> <li>- Use grounding and other fault-protection methods, such as residual current devices (RCDs). These help limit the amount of current that could pass through when there is a failure within the insulation.</li> <li>- Incorporating regular maintenance and servicing schedules of welding tools and equipment into workplace protocols can also help to prevent faults and hazards from developing.</li> </ul>	
3. Site Assessment	Slip, trip and fall hazards, Poor ventilation	2M	<ul style="list-style-type: none"> <li>- Tidy Workspace: Ensure that the metal welding workspace is kept clean and free from clutter that might cause slip, trip and fall accidents.</li> <li>- Safety Footwear: Workers must wear appropriate safety footwear with non-slip soles to avoid slipping on smooth or wet surfaces.</li> <li>- Signage: Display clear warning signs in areas where there may be slip, trip and fall hazards.</li> <li>- Illumination: Have sufficient lighting in all working areas to improve visibility and prevent incidents.</li> <li>- Obstruction Removal: Regularly inspect the area for any potential obstructions or tripping hazards and remove them promptly.</li> <li>- Safety Training: Train all workers in identifying possible risks and enforcing precautionary measures to handle welding machines safely.</li> <li>- Proper Ventilation: Make sure the workplace has adequate ventilation systems to ensure safe breathing conditions.</li> <li>- Use of Fume Extractors: Utilise portable fume extractors closer to the source of fumes to capture them efficiently and maintain air quality.</li> <li>- Respiratory Equipment: Provide suitable respiratory protective equipment (RPI) if ventilation does not reduce fume exposure to a safe level.</li> <li>- Regular Breaks: Encourage regular breaks for workers to mitigate the risk of dizziness and fatigue due to poor ventilation or long working hours.</li> <li>- Safety Checklists: Implement safety checklists for pre, during, and post-operation stages to monitor and address potential hazards timely.</li> <li>- Emergency Action Plan: Develop and enforce an emergency action plan that includes procedures for handling incidents related to slip, trip, fall and poor ventilation hazards.</li> </ul>	1L
4. Setting Up Welding Machine	Inadequate grounding, Improper connections	3H	<div></div> <div></div>	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
			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
5. Personal Protective Equipment Check	Inadequate protection, Faulty PPE	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	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
			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
6. Welding Process	Eye damage from arc flash inhalation	4A	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	2M

Sample



SAMPLE

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
			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
10. Waste Management	Hazardous material exposure, poor manual handling	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	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
11. Periodic Safety Training	Non-compliance to safety regulations, Ignorance about potential hazards			1L
12. Storage & Handling of Welding Wires	Poor Manual handling, Unexpected fall of objects	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
			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
14. Air Quality Control	Fume Inhalation, Insufficient Supply	4A	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	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
15. Emergency Procedures Training	Delayed response, Panic			1L
16. Routine Machine Safety Checks	Neglect of early warning signs, Wear and tear	3H		2M

[illegible]





Worker fatigue

2M

SAMPLE

A large, light blue rectangular area with a grid pattern, overlaid with a large, diagonal, grey 'SAMPLE' watermark. The grid consists of thin, light blue lines forming a square pattern. The watermark is a large, bold, grey 'SAMPLE' text oriented diagonally from the bottom-left to the top-right. The background of the entire image is a solid light blue color.

## 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 IF 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/list-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 2011

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

Codes of Practice NT: <https://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://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.

## 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 represent 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 selected.	<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 as 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"/>	
<b>REVIEWED BY</b>		<b>DATE REVIEWED</b>
<b>SIGNATURE</b>		<b>DATE COMPLETED</b>