

Scroll Sawing Tasks Risk Assessment

Business Name:	ABN:	
Business Address:		
Contact Person:	Phone:	Email:

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON 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 RISK ASSESSMENT is prepared before the proposed work starts.

Full Name:		
Signature:	Title:	Date:

CLIENT OR PRINCIPAL CONTRACTOR DETAILS

Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date Risk Assessment supplied to Project Manager:	

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

Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. Eliminate the hazard or redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or higher-level authorisation is required.
3H	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
1L	Proceed, following standard operating procedures. Monitor and keep records.

Consequence Scale:

Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
Catastrophic	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
Major	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
Moderate	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
Minor	First-aid only, no lost time	negligible delay	Isolated non-conformance
Insignificant	No injury	no schedule impact	Deviation caught and corrected on site

Notes on Hierarchy of Controls:

Remember to apply controls in the preferred order shown by the coloured pyramid:

- Eliminate**
- Substitute
- Isolate
- Engineering
- Administrative
- PPE

Always document **why** a lower-order control is accepted if elimination or substitution is not reasonably practicable.

aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.

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	inadequate lighting, cluttered workspace	3H	<ul style="list-style-type: none"> - Ensure adequate lighting in the workspace. - Clear the area of any unnecessary materials. - Keep the floor dry and clean of debris. - Conduct a pre-work inspection of the space. - Store tools and materials properly when not in use. - Ensure power outlets are not overloaded. - Use non-slip mats where applicable. - Conduct a safety briefing before starting work. - Ensure all workers have access to PPE. - Schedule regular maintenance checks of electrical outlets. 	2M
2. Selecting the Correct Blade	using incorrect blade type, blade defects	3L	<ul style="list-style-type: none"> - Select the blade suitable for material thickness. - Inspect blades for damage before use. - Ensure blade tension is properly adjusted. - Train workers in selecting the correct blade. - Regularly check inventory for appropriate blade types. - Store blades in a secure and dry place. - Dispose of broken or damaged blades responsibly. - Follow manufacturer's guidelines for blade selection. - Use a blade with a fine tooth for higher precision cuts. - Ensure blade is properly aligned before starting. 	1L
3. Mounting the Blade	loose blade fitting, finger injuries	3H	<ul style="list-style-type: none"> - Switch off and unplug the machine before changing the blade. - Wear cut-resistant gloves while handling blades. - Use appropriate tools for mounting the blade. - Double-check blade tightness before starting the saw. - Provide training on proper blade mounting techniques. - Ensure no loose clothing is near the operation area. - Keep hands clear of blade path. - Verify blade alignment after mounting. 	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
			<ul style="list-style-type: none"> - Conduct regular competency checks for workers. - Explain the consequences of improper mounting in safety training. 	
4. Setting Material	incorrect material placement, material kickback	3H	<ul style="list-style-type: none"> - Ensure material is supported and secured properly. - Use appropriate clamping or bracing techniques. - Verify material is aligned correctly. - Avoid overloading the material. - Use proper cutting technique. - Maintain a safe distance from the material. - Use appropriate personal protective equipment (PPE). - Ensure the work area is clear of obstructions. - Use proper lifting techniques. - Avoid sudden movements. - Use proper tool handling techniques. - Ensure the tool is in good condition. - Avoid using damaged or worn tools. - Use proper tool storage techniques. - Avoid using tools in a manner for which they were not designed. - Use proper tool selection. - Avoid using tools that are too large or too small for the task. - Use proper tool maintenance techniques. - Avoid using tools that are not properly maintained. - Use proper tool inspection techniques. - Avoid using tools that show signs of wear or damage. - Use proper tool cleaning techniques. - Avoid using tools that are dirty or contaminated. - Use proper tool storage techniques. - Avoid using tools in a manner for which they were not designed. - Use proper tool selection. - Avoid using tools that are too large or too small for the task. - Use proper tool maintenance techniques. - Avoid using tools that are not properly maintained. - Use proper tool inspection techniques. - Avoid using tools that show signs of wear or damage. - Use proper tool cleaning techniques. - Avoid using tools that are dirty or contaminated. 	2M
5. Adjusting Speed Settings	incorrect speed setting, overheating	3H	<ul style="list-style-type: none"> - Read the manufacturer's instructions carefully. - Start at a low speed and gradually increase as needed. - Monitor the material for signs of overheating or burning. - Stop the machine if overheating occurs. - Allow the material to cool before continuing. - Use appropriate PPE. - Ensure the work area is clear of obstructions. - Use proper tool handling techniques. - Ensure the tool is in good condition. - Avoid using damaged or worn tools. - Use proper tool storage techniques. - Avoid using tools in a manner for which they were not designed. - Use proper tool selection. - Avoid using tools that are too large or too small for the task. - Use proper tool maintenance techniques. - Avoid using tools that are not properly maintained. - Use proper tool inspection techniques. - Avoid using tools that show signs of wear or damage. - Use proper tool cleaning techniques. - Avoid using tools that are dirty or contaminated. 	1L
6. Starting the Scroll Saw	surprise start, electrical faults	4A	<ul style="list-style-type: none"> - Ensure the machine is properly grounded. - Check the power cord for damage. - Do not touch the power switch or controls until the machine is fully stopped. - Use proper tool handling techniques. - Ensure the tool is in good condition. - Avoid using damaged or worn tools. - Use proper tool storage techniques. - Avoid using tools in a manner for which they were not designed. - Use proper tool selection. - Avoid using tools that are too large or too small for the task. - Use proper tool maintenance techniques. - Avoid using tools that are not properly maintained. - Use proper tool inspection techniques. - Avoid using tools that show signs of wear or damage. - Use proper tool cleaning techniques. - Avoid using tools that are dirty or contaminated. 	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
7. Commencing Cut	operator inattention, material slipping	3H		2M
8. Managing Dust and Debris	inhalation of dust, material blockage	3H		1L
9. Ending the Cut	abrupt stop, kickback	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
10. Power Down and Clean-up	electric shock, falling objects	2M		1L
11. Maintaining Equipment	unreported defects, improper maintenance	3H		2M
12. Conducting Safety Inspections	missed hazards, inconsistent inspections	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
13. Worker Training and Competency	lack of knowledge, incorrect use of equipment	4A		2M
14. Emergency Preparedness	panic during emergency, inadequate first aid response	3H		2M
15. Evaluating and Improving Procedures	ignored feedback, ineffective processes	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
			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	

SAMPLE

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.