Band Saw

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

THIS RISK ASSESSMENT 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 RISK ASSESSMENT is prepared before the proposed work starts.

Full Name:		
Signature:	Title:	Date:

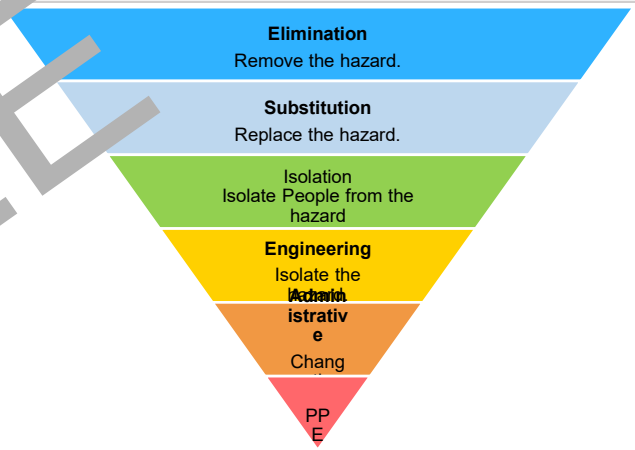
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

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
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE		
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	Rev before work
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACU	2M MO RATE	Ensure control measures in place.
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 H	1L LOW	Monitor and keep records.

HIERARCHY OF CONTROLS



Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. E inate the hazar redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or hi er-level authorisati is required.
3H	Review and approve additional c rols b ask arts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in ace and effe ive. 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:

1. **Eliminate**
2. Substitute
3. Isolate
4. Engineering
5. Administrative
6. 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. Procurement, Design and Guarding Standards	• Purchase of horizontal band saws that do not comply with Australian Standards (e.g. AS 4024 series for machinery safety) • Inadequate or non-adjustable blade guards and chip guards allowing access to the cutting zone and nip points • Lack of interlocks or fail-safe devices on doors, covers and guarding panels • Insufficient emergency stop devices (E-stops) or poor positioning making them hard to access in an emergency • Imported machinery without proper conformity assessment, documentation, or verification against WHS Regulations requirements for plant • Inadequate design of workpiece clamping systems leading to movement, ejection or instability of material • Noise, vibration, and coolant management not considered in design phase leading to chronic exposure risks • Lack of consideration for dust, mist or fume extraction for certain materials (e.g. composites, treated timber, metals with coolants) • Electrical components (switchgear, isolation points, cabling) not compliant with relevant Australian electrical standards • No provision for safe integration with existing workshop layout, power supply, extraction systems and guarding	High	• Develop and implement a formal plant procurement procedure that requires all new horizontal band saws to comply with WHS Act 2011, WHS Regulations (as in force), and relevant Australian Standards (e.g. AS/NZS 4024 series, AS 4024.1604 emergency stops, AS/NZS 3000 electrical installations) • Require suppliers to provide written confirmation of compliance, test certificates, guarding details, interlock information, and residual risk documentation prior to purchase • Specify as a minimum procurement requirement: fully enclosed or fixed guards over non-cutting blade runs, adjustable guarding at cutting area, fixed guarding over drive wheels and transmission components, and robust workpiece clamping systems • Mandate dual-channel emergency stop devices located at operator station and other accessible points around the band saw, designed and installed to relevant standards and integrated into safety-related control systems • Ensure all guards that need to be opened for blade changes or maintenance are interlocked with automatic stop of the blade and run-down monitored before access is possible • Include in procurement documentation explicit requirements for safe coolant management systems, containment of swarf and chips, and provision for connection to existing extraction or mist collection systems • Require suppliers to provide detailed plant manuals including safe operating limits, maintenance schedules, guarding diagrams, and instructions for safe isolation and lockout • Undertake a pre-commissioning design risk assessment, involving a competent person, to verify that the selected band saw design and guarding adequately control mechanical, electrical, noise, and environmental hazards • Where imported machinery is used, require conformity assessment by a competent engineer against Australian WHS requirements and relevant standards prior to acceptance • Include lifecycle considerations in procurement (ease of inspection, adjustment, cleaning and maintenance without removing critical guards) to minimise future work-at-height, confined space, or manual handling risks	Medium
2. Installation, Commissioning and Workplace Integration	• Band saw installed without formal commissioning process or verification that safety features function correctly • Inadequate floor space, clearances and access around the band saw causing congestion and unsafe movement of people and materials	High	• Establish an installation and commissioning procedure requiring sign-off by a competent person, including verification of guarding, interlocks, emergency stops, isolation points and direction of blade travel prior to use • Ensure electrical installation is performed by a licensed electrician in accordance with AS/NZS 3000, with clearly labelled main isolator, lockable isolation, and appropriate circuit protection	Medium

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	• Poor positioning relative to other plant leading to struck-by, entrapment or simultaneous operation hazards • Inadequate electrical installation, isolation points or emergency shutdown systems not clearly identified or accessible • Inappropriate location of coolant and extraction systems creating slip hazards, mist exposure or electrical risks • Insufficient lighting in work area affecting visibility of controls, blade, clamping system and workpiece alignment • Uncontrolled noise exposure due to placement near reflective surfaces or other noisy plant without acoustic management • Failure to integrate the band saw into existing workshop traffic management plans, leading to forklift or vehicle interaction risks • Lack of consideration for safe handling and storage of long or heavy stock materials in proximity to the band saw		• Design the layout so that there is adequate clearance around the band saw for material handling, operator movement, and emergency egress, consistent with safe plant layout principles and any manufacturer recommendations • Position the band saw to avoid creating pinch points with adjacent walls, benches or other machinery; maintain designated exclusion zones marked on the floor where required • Integrate the band saw into site traffic management plans, including separation from forklift routes, pedestrian walkways, and loading/unloading zones • Provide adequate, glare-free lighting over the working area, control panels, and material handling zones, ensuring illuminance meets relevant workplace lighting guidance • Install or connect appropriate coolant and extraction systems, ensuring hoses and lines are routed to avoid trip hazards, with drip trays and drainage to minimise slip risks • Undertake a commissioning noise assessment where there is potential for high noise levels and implement engineering or administrative noise controls as necessary • Document the commissioning results in a plant registration/commissioning record, including safety verification tests and any residual risks identified for management • Prohibit operational use until the commissioning checklist has been completed, reviewed, and authorised by a responsible manager or supervisor	
3. Governance, WHS Management and Consultation	• Lack of clear management accountability for band saw safety and compliance with WHS Act 2011 and WHS Regulations • Insufficient consultation with workers and Health and Safety Representatives (HSRs) regarding band saw hazards, changes or incidents • Inadequate WHS policies and procedures relating specifically to plant and machinery, including horizontal band saws • Failure to integrate band saw risks into the broader WHS risk register, leading to fragmented control implementation	High	• Define and document clear responsibilities for PCBUs, officers, managers and supervisors regarding the safe management of the band saw consistent with WHS Act 2011 duty of care provisions • Develop and implement a plant safety policy that explicitly covers band saws and references compliance with WHS legislation, Codes of Practice and relevant Australian Standards • Ensure the band saw and associated activities are included in the organisational WHS risk register, with identified controls, responsible persons and review dates • Establish a formal consultation process with workers and HSRs regarding band saw hazards, changes to procedures, introduction of new materials or processes, and outcomes of incident investigations • Incorporate band saw safety considerations into WHS committee agendas, toolbox talks and safety meetings to maintain ongoing visibility of issues • Allocate adequate resources (budget, competent persons, time for training and maintenance) to implement and sustain control measures for the band saw • Develop and communicate clear reporting pathways for hazards, near misses and incidents associated with the band saw, including anonymous reporting options where appropriate	Medium

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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
	• Absence of meaningful worker participation in risk assessments, procedure development and review • Poor communication of expectations, responsibilities and reporting pathways related to band saw safety • Lack of resources (time, budget, competent persons) allocated to maintain safe systems of work for the band saw		• Periodically review the effectiveness of band saw safety governance arrangements through internal audits, inspections and worker feedback, and record outcomes and actions • Ensure officers exercise due diligence by seeking [redacted] urance that band saw risks are identified, controlled and monitored, and that compliance [redacted] WHS duties can be demonstrated	
4. Competency, Training and Licensing	• Operators using the horizontal band saw without adequate competency or task-specific training • Supervisors not competent to verify correct use, challenge unsafe practices or support new operators • Inadequate instruction on hazard recognition (e.g. blade condition, incorrect feed rates, clamping issues) • No structured indu[redacted]n for contractors, apprentices or tem[redacted]rary workers who may use or work n[redacted]r the ba[redacted] • Poor understanding o[redacted] emergency procedures (e.g. use of E-stop, isol[redacted]n, first aid response to cutting injuri[redacted] • Lack of awareness of material-specific hazards (e.g. cutting alloys, composites or chemically treated timber) • Inadequate training on manual handling and ergonomics for handling long or heavy stock materials	High	[redacted]	Medium
5. Safe Operating Procedures and Administrative Controls	• Absence of a documented safe operating procedure (SOP) or procedure not reflecting actual practice	High	[redacted]	Medium

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	• Inconsistent application of controls between shifts, sites or supervisors • Over-reliance on informal instructions and on-the-job learning leading to variation in safety standards • Lack of clear rules about who may use the band saw, under what conditions, and with what authorisations • Failure to manage simultaneous activities around the band saw (e.g. cleaning, adjustments, nearby plant operation) • No clear limits set for acceptable material types, sizes, or conditions (e.g. bent, rusty or contaminated stock) for cutting • Inadequate administrative controls for housekeeping, waste management, and temporary storage of cut materials		[redacted]	
6. Preventive Maintenance, Inspection and Asset Management	• Lack of a structured preventive maintenance program for the band saw and associated systems (coolant, extraction, guards, clamps) • Failure to inspect and maintain safety-critical components such as guards, interlocks, emergency stops, and isolation devices • Operating with worn, damaged or incorrectly tensioned blades due to poor maintenance systems • Unplanned breakdowns leading to reactive, rushed repairs and increased risk of unsafe temporary fixes • Inadequate lubrication or cooling system maintenance causing	High	[redacted]	Medium

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	overheating, accelerated wear, or fire risk • Poor recordkeeping of maintenance activities, making it difficult to track recurring faults or demonstrate compliance • Contractors performing maintenance without being briefed on site-specific hazards, procedures and isolation requirements		[redacted]	
7. Isolation, Lockout–Tagout and Non-Routine Interventions	• Inadequate systems for isolating and de-energising the band saw during maintenance, cleaning, blade changes or fault-finding • Work carried out on or near moving parts due to poor lockout–tagout (LOTO) practices • Lack of clarity about which energy sources must be isolated (electrical, pneumatic, potential energy in moving parts) • Multiple workers working on the band saw without a group isolation process, leading to premature re-energisation • Temporary overrides of interlocks and safety devices during troubleshooting with no formal control or approval process • Informal practices such as relying solely on emergency stop buttons instead of full isolation for non-routine tasks	High	[redacted]	Medium

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			[redacted]	
8. Physical Environment, Housekeeping and Ergonomics	• Poor housekeeping around the band saw leading to slips, trips and falls due to swarf, coolant spills or off-cuts • Inadequate storage and support systems for long or heavy stock resulting in manual handling injuries or falling objects • Uncontrolled noise, vibration and thermal comfort issues affecting operator health and concentration • Insufficient ventilation or extraction leading to build-up of fumes, dust or coolant mist in the work area • Suboptimal working heights and postures causing musculoskeletal stra during repeated operation • Inadequate demarcat perational zones and pedestri walkways around the band saw	Medium	[redacted]	Low
9. Personal Protective Equipment and Welfare Provisions	• Incorrect or inconsistent use of PPE exposing workers to cuts, eye injuries, noise, or skin irritation from coolants • Over-reliance on PPE as the primary control instead of higher-order controls for band saw risks • Lack of clear standards for suitable clothing and jewellery policies around rotating machinery • Inadequate facilities for handwashing, first aid and injury management in proximity to the band saw area	Medium	[redacted]	Low

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	• PPE not compatible with other safety requirements (e.g. face shields interfering with vision or communication if poorly selected) • PPE not maintained, replaced or stored correctly leading to compromised protection		[redacted]	
10. Incident Reporting, Emergency Response and Continuous Improvement	• Under-reporting of near misses, minor injuries or unsafe conditions associated with the band saw • Inadequate emergency preparedness for serious lacerations, amputations or eye injuries • Lack of structured investigation of incidents leading to repeat events and missed learning opportunities • No systematic review of band saw risk controls in light of incidents, audit findings or legislative changes • Poor communication of incident learnings and control improvements to operators and supervisors • Failure to meet notifiable incident reporting requirements under WHS legislation for serious incidents involving the band saw	High	[redacted]	Medium

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 FOR 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

New South Wales
Work Health and Safety Act 2011
Work Health and Safety Regulations 2025
Legislation NSW: https://www.safework.nsw.gov.au/legal-obligations/legislation
Codes of Practice NSW: https://www.safework.nsw.gov.au/resource-library/list-of-codes-of-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/forms-and-resources/codes-of-practice

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.

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

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