

Woodworking Saws Operation

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

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THIS 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:

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. WHS Governance, Legal Compliance & Consultation | <ul style="list-style-type: none"> Lack of formal WHS management plan specific to woodworking saw operations Inadequate understanding of duties under WHS Act 2011 and WHS Regulations by officers and PCBUs Insufficient consultation with workers and Health and Safety Representatives (HSRs) on saw-related risks and changes to processes No formal process to review incidents, near misses and regulator updates relating to woodworking machinery Failure to integrate manufacturer instructions and Australian Standards (e.g. AS/NZS 4024 series for machinery safety) into local procedures Poor coordination of WHS duties where multiple PCBUs share the same workshop or equipment | 4A | <ul style="list-style-type: none"> Develop and maintain a documented WHS management plan that includes a specific section on fixed and portable woodworking saws (e.g. band saw, panel saw, linear saw, table saw, beam saw, multi-rip saw, radial arm saw, scroll saw, tilting arbor saw, double end overhead saw, panel cutting machines, bench saws, jigsaws and hand-held routers) Assign clear WHS responsibilities to officers and senior managers, including explicit oversight of machinery safety, guarding, isolation and training systems Implement formal consultation mechanisms (e.g. WHS committee, regular toolbox talks focused on sawing operations, and scheduled meetings with HSRs to discuss changes to equipment, processes and controls) Establish a formal register referencing the WHS Act 2011, WHS Regulations and relevant Codes of Practice (e.g. Managing Risks of Plant in the Workplace) and ensure annual review Employ requirements that all machinery-related policies and procedures align with relevant Australian Standards and manufacturer instructions before commissioning equipment Develop a formal process to review regulator safety alerts, industry guidance and incident learnings, and to integrate findings into procedures for all sawing tasks Create cooperation and coordination agreements where more than one PCBU interacts in the workshop (e.g. on hire workers, contractors, training providers) to clarify shared responsibilities | 3H |
| 2. Plant Procurement, Design & Commissioning of Saws | <ul style="list-style-type: none"> Purchasing band saws, panel saws, radial arm saws, table saws, multi-rip saws or jigsaws without adequate safety features or guarding provisions Failure to assess suitability of saws for intended hardwood use or shape (e.g. log guiding, milling or resawing requirements) Importing or fabricating machinery that does not meet Australian Standards for guarding, interlocks and emergency stops Inadequate pre-commissioning risk assessment before introducing new saw types (e.g. beam saw, linear saw, tilting arbor saw, double end overhead saw, horizontal panel saw) Lack of standardisation leading to multiple control layouts, increasing operator confusion and error | 4A | <ul style="list-style-type: none"> Implement a formal plant procurement procedure requiring WHS review and sign-off for all new or modified saws, including verification against WHS Regulations and relevant Australian Standards Specify minimum safety requirements for all woodworking saws (e.g. fixed and adjustable guarding, riving knives where applicable, braked motors, emergency stop devices, two-hand controls where appropriate, integrated dust extraction points) Require pre-purchase supplier safety documentation, including risk assessments, manuals, maintenance schedules and CE/Australian compliance statements for each saw type Conduct a formal commissioning risk assessment for each new saw installation or major modification, with involvement from competent maintenance personnel, HSRs and experienced operators Standardise controls, labelling and emergency stop locations across similar saws as far as reasonably practicable to reduce user confusion Ensure integration of saws into workshop dust extraction, noise reduction and power supply systems is designed and documented at procurement stage Maintain a plant register capturing design safety features, residual risks, guarding arrangements and required safety checks for each saw category | 2M |

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| | <ul style="list-style-type: none"> Poor consideration of dust extraction, noise, vibration and kickback control in the design or purchase phase | | | |
| 3. Workshop Layout, Traffic Management & Materials Flow | <ul style="list-style-type: none"> Poor layout causing congestion around band saws, panel saws, table saws and beam saws, increasing risk of contact with moving blades Inadequate infeed and outfeed space for long timber, logs and panels leading to awkward body positions and loss of control of stock Uncontrolled pedestrian and forklift interaction close to sawing operations and material stacks Inadequate segregation of high-risk tasks such as guiding logs through saws, milling lumber and resawing from other workshop traffic Trip hazards, clutter and offcut accumulation in walkways and around fixed machinery Insufficient lighting or poorly placed lighting, leading to reduced visibility of cut lines, blade position and hazards Inadequate storage systems for rough sawn timber, hardwood stock and finished products creating instability and manual handling risks | 4A | <ul style="list-style-type: none"> Develop and implement a workshop layout plan that provides clear exclusion zones and walkways around all fixed saws with marked safe working areas on the floor Ensure adequate infeed and outfeed lengths are provided for all saw types (e.g. long beds, roller tables, support stands) and are documented against design standards Implement a traffic management plan that physically separates pedestrian walkways from high-risk sawing and forklift operating zones using barriers, markings and signage Locate high-risk sawing operations (e.g. log guiding, resawing, milling from rough sawn to finished dimensions) away from main thoroughfares to minimise distraction and interference Establish housekeeping standards, including scheduled removal of offcuts, sawdust and waste from all saw areas and use of designated bins and racks Provide and maintain adequate, glare-free lighting over all saw benches, measurement areas and material handling zones, with periodic inspections Design and maintain racked storage systems for logs, hardwood, sheets and finished components to minimise movement, instability and crush hazards in sawing areas | 2M |
| 4. Machine Guarding, Safety Devices & Interlocks | <ul style="list-style-type: none"> Inadequate or missing blade guards on table saws, band saws, radial arm saws, scroll saws and panel saws Bypassing or disabling safety interlocks, guards, riving knives or spreaders to speed up production or accommodate irregular shapes Guarding that is difficult to adjust or incompatible with certain tasks (e.g. cutting irregular shapes, custom fits, trimming, scroll sawing tasks) leading to non-use Inconsistent guarding standards across similar machines (e.g. different table | 4A | <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> | 2M |

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| | <p>saws in the same workshop) causing confusion</p> <ul style="list-style-type: none"> • Lack of systematic inspection and maintenance of guarding and safety devices • No formal process to manage temporary removal of guards for maintenance, cleaning or specific controlled tasks | | [REDACTED] | |
| 5. Energy Isolation, Lockout/Tagout & Access Control | <ul style="list-style-type: none"> • Uncontrolled start-up of saws during maintenance, blade changes, cleaning or jam clearing • Lack of a formal lockout/tagout (LOTO) procedure for fixed and portable saws • Inadequate isolation points or poorly labelled isolators for beam saws, panel saws, multi-rip saws and large band saws • Unauthorised or untrained persons accessing or starting saws, particularly after hours or during shift changes • Failure to manage stored energy (e.g. pneumatic clamps, hydraulic systems, spring tension on blade guides) • Use of portable tools (e.g. jigsaws, routers) without appropriate isolation before changing blades or bits | 4A | [REDACTED] | 2M |
| 6. Competency, Licensing, Training & Authorisation | <ul style="list-style-type: none"> • Operators using band saws, table saws, radial arm saws, panel saws, beam saws or multi-rip saws without adequate competency • Inadequate training on specific hazards such as kickback, binding, cutting irregular shapes, resawing techniques and guiding logs through saws • Lack of formal competency assessment and refresher training for sawing operations and associated tasks (e.g. milling, panel machining, trimming, scroll sawing) | 4A | [REDACTED] | 2M |

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| | <ul style="list-style-type: none"> • Insufficient training of supervisors on how to verify competency and enforce safe systems of work • Contractors, apprentices and labour hire workers operating saws without verification of skills and induction into local procedures • No formal authorisation system restricting high-risk machines to competent persons only | | [REDACTED] | |
| 7. Standard Operating Procedures, Work Instructions & Permits | <ul style="list-style-type: none"> • Absence of standardised procedures for key sawing operations (e.g. milling lumber, guiding logs through saws, panel cutting machining, resawing, trimming using scroll saws) • Procedures that are overly task-specific and not aligned with broader risk controls (focusing on steps rather than system controls) • Outdated or inconsistent work instructions across different machines or shifts • Failure to cover non-standard and higher-risk activities such as cutting very dense hardwoods, complex irregular shapes or oversized panels • No formal process for reviewing and approving procedures before implementation • Lack of controls for hot work, confined modifications or other permit-requiring activities associated with saw maintenance or modification | 3H | [REDACTED] | 2M |
| 8. Maintenance, Inspection & Calibration Systems | <ul style="list-style-type: none"> • Lack of preventive maintenance programs for bearings, arbors, brakes, guards, dust extraction and emergency stops • Unreported or unrepaired defects such as damaged guards, worn blades, misaligned fences and malfunctioning brakes • Inaccurate or uncalibrated measurement systems, fences and | 4A | [REDACTED] | 2M |

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| | <p>guides leading to binding, kickback or incorrect cuts</p> <ul style="list-style-type: none"> • Failure to inspect log guides, rollers and feed mechanisms used for milling, resawing and guiding logs through saws • Reactive-only maintenance culture relying on breakdowns rather than scheduled inspections • Inadequate record-keeping of maintenance, inspections and repairs | | [REDACTED] | |
| 9. Product, Material & Workpiece Management | <ul style="list-style-type: none"> • Processing unknown or unsuitable materials (e.g. timber with embedded nails, stones or foreign objects) leading to blade failure or kickback • Using inappropriate saw types or blades for very dense hardwoods, large logs or specialised cuts • Inadequate inspection and preparation of logs and rough sawn timber before guiding through band saws or chain saws • Cutting excessively small, thin or irregular workpieces without appropriate jigs, fixtures or supports • Poor stock organisation leading to rushed selection, misidentification of materials and incorrect set-ups • Insufficient control of offcuts and waste causing entanglement, jams or projectiles near blades | 4A | [REDACTED] | 2M |
| 10. Exposure to Dust, Noise, Vibration & Hazardous Substances | <ul style="list-style-type: none"> • Excessive wood dust generation from band saws, table saws, panel saws, routers and sawmills leading to respiratory disease and increased fire risk • High noise levels from multiple saws operating concurrently causing noise-induced hearing loss | 4A | [REDACTED] | 2M |

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| | <ul style="list-style-type: none"> • Hand–arm vibration from prolonged use of portable jigsaws, routers and other powered saws • Exposure to hazardous timber species, treated wood or composite materials releasing harmful dusts • Inadequate design, maintenance or use of dust extraction and collection systems • Poor management of fine dust build-up on surfaces, ledges and electrical components contributing to explosion or fire risk | | [REDACTED] | |
| 11. Ergonomics, Manual Handling & Work Organisation | <ul style="list-style-type: none"> • Manual handling of heavy hardwood beams, large panels and logs to and from saws without mechanical aids • Awkward postures and repetitive motions when feeding or guiding timber through band saws, panel saws and table saws • Poor workstation heights and controls layout on fixed saws leading to strain injuries • Fatigue arising from high work rates, extended hours of inadequate rotation in high-demand periods (e.g. peak milling or panel cutting runs) • Insufficient planning of staffing levels resulting in one person attempting tasks designed for two-person operation • Inadequate breaks or task variation for operators performing monotonous sawing or trimming operations | 3H | [REDACTED] | 2M |
| 12. Emergency Preparedness, Incident Management & First Aid | <ul style="list-style-type: none"> • Inadequate planning for serious injuries such as amputations, deep lacerations or eye injuries from sawing operations • Poorly located or insufficient emergency stop devices on larger saws and production lines | 4A | [REDACTED] | 2M |

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| | <ul style="list-style-type: none"> Lack of trained first aiders familiar with common woodworking injuries and dust or noise-related health issues Delayed response due to unclear emergency communication procedures or blocked egress routes Under-reporting of near misses and minor incidents involving kickback, binding, blade contact or flying debris Insufficient post-incident investigation and follow-up leading to repeat events | | [REDACTED] | |
| 13. Contractor, Visitor & Public Interface Management | <ul style="list-style-type: none"> Contractors performing installation, maintenance or modification work on saws without alignment to site WHS systems Visitors or clients entering workshop areas without awareness of saw-related hazards Public exposure to noise, dust or projectiles where workshops are adjacent to public areas or shared facilities Inadequate supervision or external technicians altering controls, guards or programming on automated saw systems Lack of clear induction requirements and safe access routes for non-employees | | [REDACTED] | 2M |
| 14. Change Management, Projects & Continuous Improvement | <ul style="list-style-type: none"> Uncontrolled changes to saw layouts, production flow or equipment settings introducing new risks Upgrades or modifications to saws (e.g. new blades, automation, additional feeds) without formal risk assessment Introduction of new materials (e.g. different hardwoods, composites) without reviewing dust, kickback and cutting hazards Software or control system changes to automated saws not validated before use | 3H | [REDACTED] | 2M |

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| | <ul style="list-style-type: none"> Failure to capture and act on improvement opportunities identified by operators and maintenance staff | | [REDACTED] | |
| 15. Monitoring, Audit & Performance Review | <ul style="list-style-type: none"> Lack of systematic monitoring of saw-related WHS performance indicators (e.g. incidents, near misses, inspection findings) Failure to verify that documented controls for woodworking saw operations are implemented and effective in practice Complacency developing over time as serious incidents become infrequent Inadequate management review of WHS risks associated with sawing operations and workshop activities No structured mechanism to update the risk assessment and controls as legislation or guidance changes | 3H | [REDACTED] | 1L |
| | | | | |

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 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>

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 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-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) Regulation 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>

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>

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

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.