

Hammer Drill

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. Procurement and Design Selection	<ul style="list-style-type: none"> • Selection of hammer drills that are not fit for purpose (e.g. incorrect impact rating, insulation class, vibration rating) for the intended construction or maintenance tasks • Failure to specify safety features such as double insulation, residual current device (RCD) compatibility, mechanical clutch, anti-kickback technology, vibration-damping handles and effective dust extraction ports • Purchasing low-quality or non-compliant hammer drills that do not meet relevant Australian Standards (e.g. AS/NZS 60745 or AS/NZS 3120) or electrical safety requirements • Lack of consultation with workers, HSRs, and competent supervisors during equipment selection, resulting in poor match between tool capabilities and actual rotary hammer applications • Inadequate consideration of compatibility with existing plant control systems, drill bits, anchors and power supply arrangements • Failure to consider ergonomics (weight, grip, trigger placement) leading to increased risk of musculoskeletal disorders from frequent hammer drilling operations 	High	<ul style="list-style-type: none"> • Develop and implement a documented plant procurement procedure that requires WHS risk criteria to be addressed before purchasing any hammer drill or rotary hammer drill, in line with WHS Act 2011 duties for PCBUs to provide safe plant • Specify compliance with applicable Australian Standards and regulatory requirements in purchase specifications, including electrical safety, impact energy rating, vibration emission data, and compatibility with RCD-protected power supply • Mandate selection of hammer drills with integrated safety features such as mechanical clutch, anti-kickback control handle handles, lock-off switches, and effective dust extraction attachments suitable for masonry and concrete drilling • Include requirements for low vibration models with ergonomic design, reduced noise output where reasonably practicable, and suitability for the duration and frequency of anticipated rotary hammer applications • Establish a formal consultation process with end users, health and safety representatives and maintenance personnel as part of procurement decision-making, and record outcomes • Ensure accessories (e.g. SDS drill bits, chisels, anchors, dust shrouds) are compatible with the selected hammer drill systems and are sourced from reputable suppliers with appropriate safety information • Maintain a central register of approved hammer drill models and accessories that have been assessed and authorised for use within the organisation 	Medium
2. Policy, Governance and WHS Management System	<ul style="list-style-type: none"> • Absence of a documented WHS policy and plant safety procedure covering hammer drills and rotary hammer operations • Unclear allocation of WHS responsibilities between officers, managers, supervisors and workers, leading to gaps in oversight of hammer drill risks • Lack of integration of hammer drill risks into the organisation's overall risk management framework, including 	High	<ul style="list-style-type: none"> • Establish and endorse a WHS policy that explicitly references plant and powered hand tools, including hammer drills, and outlines the organisation's commitment to eliminating or minimising risks so far as is reasonably practicable in accordance with WHS Act 2011 s19 • Develop a documented plant risk management procedure that includes hammer drills, addressing hazard identification, risk assessment, implementation of controls, and periodic review • Define and document WHS roles, responsibilities and accountabilities for officers, managers, supervisors and workers in relation to hammer drill safety, and communicate these through position descriptions and inductions • Integrate hammer drill risk management into the organisation's existing WHS management system elements such as consultation arrangements, issue resolution, incident reporting, and corrective action tracking 	Medium

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	<p>consultation, reporting and incident investigation processes</p> <ul style="list-style-type: none"> • Failure of officers to exercise due diligence in verifying that adequate resources and processes are in place to manage hammer drill-related risks, contrary to WHS Act 2011 s27 • Inadequate processes for verifying compliance with relevant WHS legislation, Codes of Practice (e.g. Managing Risks of Plant in the Workplace) and internal standards relating to hammer drill use • Failure to systematically review and update hammer drill risk controls following incidents, near misses, regulatory updates or workplace changes 		<ul style="list-style-type: none"> • Implement an internal audit and inspection program that periodically verifies compliance with hammer drill procedures, training requirements, maintenance schedules, and storage arrangements • Ensure officers receive information and reports about hammer drill-related performance (e.g. incidents, noise/vibration exposures, silica dust controls) to support due diligence obligations under WHS Act 2011 • Establish a formal management review process that considers hammer drill risk data, consultation feedback and regulatory changes, and documents decisions regarding improvements to the system 	
3. Training, Competency and Supervision	<ul style="list-style-type: none"> • Workers using hammer drills and rotary hammer drills without adequate training or verification of competency • Supervisors lacking sufficient knowledge to oversee safe hammer drilling operations and enforce control measures • Failure to provide training on specific risks such as kickback, hand-arm vibration, noise exposure, respirable crystalline silica from drilling concrete, and electrical hazards • Inadequate instruction on correct use of dust extraction systems, RCDs, appropriate drill bits and anchors, and pre-use condition checks • Lack of refresher training or competency reassessment after incidents, equipment changes, or introduction of new rotary hammer applications • Language, literacy or cultural barriers preventing workers from understanding instructions, safety signage or manufacturer's information 	High	<ul style="list-style-type: none"> • Develop a formal competency-based training program for hammer drill and rotary hammer drill use, incorporating theory and practical assessment, aligned with WHS Regulation requirements for plant • Ensure training covers hazard identification, correct selection and set-up of hammer drills, safe drilling techniques, dust and noise controls, vibration management, and emergency response procedures • Maintain training records and a hammer drill operator register that identifies who is authorised to use specific models or applications (e.g. overhead drilling, anchor installation, chiselling) • Provide toolbox talks and periodic refresher training that address recurring issues from incident reports, changes in equipment or updated manufacturer instructions • Implement supervision arrangements proportionate to the risk, ensuring new or inexperienced workers are directly supervised until competence is demonstrated and documented • Provide information and training materials in formats and languages suitable for the workforce, using diagrams and demonstrations to address literacy limitations • Include verification of training effectiveness in safety observations and internal audits, and require retraining where unsafe practices or knowledge gaps are identified 	Low

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4. Safe Systems of Work and Procedures	<ul style="list-style-type: none"> Lack of documented safe work procedures for hammer drilling operations and rotary hammer applications across varied work environments Inconsistent application of controls for different tasks (e.g. masonry drilling, overhead work, floor penetration, chiselling) leading to uncontrolled exposure to noise, dust, vibration and impact Failure to integrate hammer drill controls into broader construction or maintenance work planning, including traffic management, work at height and confined spaces No formal requirement to use pre-start checks, lock-out procedures or safe isolation when defects or electrical issues are identified Unclear or missing guidance on when to stop work due to excessive noise, vibration, dust levels or fatigue Reliance on informal practices and practice rather than task-based, documented systems compliant with WHS Regulation for plant 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium
5. Plant Registration, Identification and Documentation	<ul style="list-style-type: none"> Hammer drills not formally recorded within plant registers, resulting in poor oversight of inspection, maintenance and replacement Lack of traceability between individual hammer drills, their service history and any associated incidents or near misses Missing or inaccessible manufacturer's instructions, safety data and technical documentation for hammer drills and compatible accessories Inconsistent tagging or identification systems making it difficult for supervisors to verify that only authorised, compliant tools are in operation 	Medium	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Low

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	<ul style="list-style-type: none"> Failure to capture critical information such as vibration levels, noise ratings and power requirements for each hammer drill model 		[REDACTED]	
6. Inspection, Testing and Maintenance Systems	<ul style="list-style-type: none"> Inadequate preventive maintenance and inspection regimes for hammer drills, leading to mechanical or electrical failure in service Failure to implement a structured test and tag program for corded hammer drills in accordance with WHS and electrical safety requirements Damaged cords, plugs, chucks, switches or housings going undetected due to lack of systematic checks Dust ingress and lack of servicing causing overheating, reduced performance and increased risk of electric shock or fire No formal process for removing defective hammer drills from service and ensuring they are not used until repaired and verified safe Maintenance activities being carried out by unqualified persons without reference to manufacturer instructions 	High	[REDACTED]	Medium
7. Electrical Safety Management	<ul style="list-style-type: none"> Use of hammer drills on non-RCD-protected circuits increasing the risk of electric shock, particularly in damp or conductive environments Overloading of circuits or use of inappropriate extension leads and power boards during hammer drilling operations Inadequate governance over portable RCDs, including testing intervals and record keeping Damaged or makeshift adapters, leads or plugs being used due to poor control over electrical accessories Inadequate procedures for working near live electrical services, concealed 	High	[REDACTED]	Medium

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	<p>wiring or switchboards while undertaking hammer drilling</p> <ul style="list-style-type: none"> Lack of coordination between electrical and non-electrical workers regarding isolation, permits and verification of de-energisation 		[REDACTED]	
8. Exposure to Noise, Vibration and Fatigue	<ul style="list-style-type: none"> Excessive noise generated by hammer drilling and rotary hammer operations contributing to noise-induced hearing loss Prolonged or frequent use of hammer drills resulting in hand-arm vibration exposure, potentially leading to long-term musculoskeletal or circulatory disorders Inadequate management of cumulative exposure when multiple noisy and vibrating tools are used across a shift Poor planning of work duration and breaks, leading to physical and mental fatigue that undermines safe operation and hazard awareness Lack of systems to monitor, review noise and vibration exposure data and adjust controls accordingly 	High	[REDACTED]	Medium
9. Dust, Silica and Environmental Controls	<ul style="list-style-type: none"> Release of respirable crystalline silica and other hazardous dusts during hammer drilling into concrete, masonry or stone, increasing risk of occupational lung disease Inadequate use or maintenance of on-tool dust extraction, shrouds or local exhaust ventilation systems Poor housekeeping systems leading to accumulation of drilling dust, creating slip hazards and secondary airborne dust exposure Lack of integration between hammer drilling dust controls and broader site environmental controls, including waste management and air quality requirements 	High	[REDACTED]	Medium

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	<ul style="list-style-type: none"> Failure to provide suitable respiratory protective equipment (RPE) or to manage its fit, maintenance and ongoing effectiveness 		[REDACTED]	
10. Storage, Handling and Transport of Hammer Drills	<ul style="list-style-type: none"> Improper storage of hammer drills, bits and accessories leading to damage, loss or unauthorised use Manual handling risks from moving multiple heavy hammer drills, cases, vacuum units and accessories between vehicles, floors or sites Inadequate vehicle and site storage systems resulting in unsecured items becoming projectiles during transport or causing trips in work areas Lack of systems to segregate serviceable hammer drills from those tagged out of service Exposure of electrical tools to moisture, extreme temperatures or corrosive substances due to poor storage practices 	Medium	[REDACTED]	Low
11. Contractor and Labour Hire Management	<ul style="list-style-type: none"> Contractors and labour hire workers using hammer drills without alignment to the host PCBU's WHS procedures and standards Inconsistent competency verification for external workers undertaking rotary hammer applications on site Confusion over responsibility for provision, inspection and maintenance of hammer drills where both host and contractor supply tools Inadequate communication of site-specific hazards, controls and environmental requirements relating to hammer drilling operations Failure to coordinate simultaneous operations between multiple PCBUs, increasing risks of interaction, noise, dust and access conflicts 	High	[REDACTED]	Medium
12. Incident Reporting, Monitoring and	<ul style="list-style-type: none"> Under-reporting of incidents, near misses and equipment defects involving 	Medium	[REDACTED]	Low

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Continuous Improvement	hammer drills, leading to missed learning opportunities <ul style="list-style-type: none"> • Lack of analysis of trend data relating to hammer drilling injuries, equipment failures, dust or noise exceedances • Failure to investigate serious or recurring hammer drill incidents adequately and to implement effective corrective actions • No systematic follow-up to verify that implemented controls for hammer drills remain effective over time • Insufficient worker consultation and feedback loops on the practicality and effectiveness of hammer drill risk controls 		[REDACTED]	

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.