Textiles Rubber and Composite Material Processing			
Business Name:		ABN:	
Business Address:			
Contact Person:	Phone:	Email:	

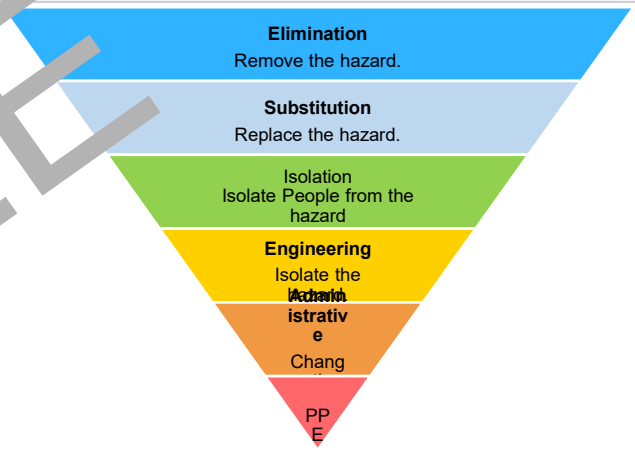
THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE PROJECT		
Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.		
Full Name:		
Signature:	Title:	Date:

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. WHS Governance, Legal Compliance and PCBUs' Duties	• Inadequate understanding of WHS Act 2011 and WHS Regulation obligations for textile, rubber and composite processing operations • Failure to clearly allocate WHS responsibilities between PCBUs, directors, managers, supervisors and labour hire providers • Lack of documented WHS policy, objectives and due diligence processes for senior officers • Insufficient consultation, cooperation and coordination between multiple PCBUs on the site (e.g. contractors servicing presses, extruders, mills, granulators, meter-mixers) • No systematic monitoring of compliance with plant registration, hazardous chemicals, noise, manual handling and confined space requirements • WHS decisions made without reference to hierarchy of control or contemporary Australian standards and codes of practice	4A	• Develop and endorse a site-specific WHS policy and WHS management plan that references the WHS Act 2011, WHS Regulation and applicable Codes of Practice (e.g. Managing Risks of Plant in the Workplace, Hazardous Chemicals, Noise, Manual Tasks, Welding) • Define and document WHS roles, responsibilities and authorities for officers, managers, supervisors, HSRs and workers, including labour hire and contractor personnel • Implement an officer due diligence framework including regular WHS performance reporting to the Board/owner (e.g. lead indicators, incident trends, audit outcomes, training completion) • Establish formal consultation arrangements (WHS committees, HSRs, toolbox meetings) and documented procedures for consultation, cooperation and coordination with other PCBUs working on site • Maintain a legal compliance register covering plant, hazardous chemicals, noise, emergency planning, health monitoring and licensing, and review it at least annually • Schedule independent WHS audits or gap assessments against the WHS Act 2011 and relevant standards (e.g. AS/NZS ISO 45001) with documented corrective action plans • Ensure procurement and engineering projects (new presses, extruders, granulators, meter mixers, cutting machines) include a documented WHS legislative and standards review at design/selection stage	3H
2. Plant and Equipment Safety Management (Mills, Extruders, Presses, Granulators, Cutting and Sewing Machines)	• Inadequate guarding or interlocking on rubber compounding mills, rubber extruders, rubber moulding presses, granulators, rumblers and fabric cutting machines leading to entanglement, drawing-in and crush injuries • Bypassing or defeating safety interlocks on meter mixer urethane units, moulding presses, granulators or sewing machines to maintain throughput • Lack of structured plant risk assessments for new and existing plant (including casting resin furniture parts set-ups and glass-fibre reinforced plastic processes) • Inadequate maintenance and inspection programme for critical safety components (e.g. emergency stop	4A	• Maintain a plant register and conduct formal, documented plant risk assessments for all high-risk equipment including rubber mills, extruders, moulding presses, granulators, rumblers, fabric cutting machines, industrial sewing machines and meter-mixer urethane units • Ensure all plant is designed, installed and verified to relevant Australian Standards (e.g. AS 4024 series – Safety of Machinery) including fixed guards, interlocked guards, nip protection and emergency stop devices • Implement a written standard for machine guarding and safety functions that prohibits operation of plant with defeated or removed guards, supported by disciplinary and supervisory enforcement • Establish a preventative maintenance system (computerised maintenance management system or equivalent) with schedules for inspection, testing and servicing of guards, interlocks, emergency stops, brakes and noise controls • Introduce a plant change management procedure requiring engineering review, risk assessment, verification and sign-off before any modification or introduction of new or used plant	2M

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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
	functions, light curtains, nip guards, brakes) • Uncontrolled introduction of second-hand or modified plant without verification of compliance to WHS Regulation and relevant Australian Standards • Poor change management for plant modifications (e.g. added rollers for rolling fabric onto tubes, new stringing systems for multiple layers, altered tooling on presses) • Inconsistent lock out tag out (LOTO) and isolation procedures for breakdowns, cleaning, die changes and jams • Noise exposure from granulators, rumblers, mills, extruders and fabric cutting machinery not systematically assessed or controlled		• Develop and enforce a standardised LOTO procedure for all isolation points, with specific procedures for mills, extruders, presses, granulators, cutting machines and meter mixers, including verification of zero energy state • Conduct noise surveys for all relevant plant and implement engineering noise controls (enclosures, isolation, silencers) and administrative controls in line with the Managing Noise and Preventing Hearing Loss at Work Code of Practice • Provide operator and maintainer competency based training on plant risks, guarding, LOTO and emergency procedures, with refresher training and verification of competence	
3. Hazardous Chemicals and Resin Systems Management	• Inadequate identification and assessment of hazardous chemicals used in casting resin furniture parts, urethane meter mixing, compounding and glass-fibre reinforced plastic work • Absence of or outdated safety data sheets (SDS) and chemical registers for resins, curing agents, solvents, accelerators, plasticisers, epoxy cures and cleaning agents • Inappropriate storage and segregation of incompatible chemicals (e.g. oxidisers, flammables, acids) leading to fire, explosion or release • Uncontrolled airborne exposure to hazardous vapours, aerosols and mists during resin mixing, pouring, curing and cleaning processes • Skin and respiratory sensitisation risks from isocyanates, styrenes, epoxy systems and glass-fibre reinforced plastic resins due to inadequate controls	4A	• Maintain a comprehensive hazardous chemicals register aligned to WHS Regulation requirements, covering all resins, curing agents, urethane components, solvents, rubber additives and composites chemicals used on site • Ensure current Australian-compliant SDS are readily accessible for all hazardous chemicals and integrated into induction and task-specific training for relevant workers • Conduct formal hazardous chemicals risk assessments (including isocyanates and glass-fibre reinforced plastic systems) and document control measures in line with the Managing Risks of Hazardous Chemicals in the Workplace Code of Practice • Implement engineered ventilation controls (local exhaust ventilation at casting stations, meter-mixer heads, mixing vessels and cleaning stations) designed, tested and maintained by competent persons • Develop and enforce chemical storage standards for segregation, bunding, temperature control and fire safety consistent with Australian Standards and Fire Authority requirements • Introduce a robust decanting and labelling procedure, including use of compliant workplace labels and banning the use of unlabelled containers • Provide health monitoring programmes where required under WHS Regulation (e.g. for isocyanates) and ensure workers are informed and consent processes are in place • Develop chemical spill and exposure emergency response procedures, ensure availability of spill kits and appropriate first aid, and conduct periodic drills and competency checks	2M

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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
	• Poor labelling and decanting practices for resins, hardeners and solvents into unlabelled containers • No formal hazardous chemicals risk assessment or implementation of hierarchy of control measures • Insufficient emergency preparedness for chemical spills, leaks and first aid for exposures			
4. Dust, Fume, Fibre and Airborne Contaminant Control	• Generation of respirable and inhalable dusts from granulators, rumblers, fabric cutting, trimming of rubber products and sanding of composite materials • Release of glass-fibre fragments and fibres during use of glass-fibre reinforced plastic and stringing multiple layers • Inadequate control of fumes and vapours from hot rubber processing, curing presses and extruders • Lack of atmospheric monitoring to confirm effectiveness of ventilation for dusts, fibres and fumes • Housekeeping systems that allow accumulation of combustible dust or fibrous material on surfaces, beams and in extraction ducting • Failure to consider combined exposure from multiple contaminants across shifts and roles		[redacted]	2M
5. Manual Tasks and Ergonomic Risk Management	• Repetitive movements and awkward postures during operating industrial sewing machines and standard sewing machines, fabric cutting, and stringing multiple layers of textiles and composites • Forceful exertions when manually handling rubber bales, rolls of fabric, composite panels and moulds • Poor workstation design for rolling fabric onto tubes, feeding rubber mills,	3H	[redacted]	1L

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	loading extruder hoppers and accessing moulding presses • Lack of systematic identification and assessment of hazardous manual tasks in production, rework and packing activities • Inadequate job rotation, rest breaks and workload management contributing to musculoskeletal disorders		[redacted]	
6. Process Safety for Rubber Compounding, Extrusion and Moulding	• Uncontrolled temperature, pressure or mixing parameters in rubber compounding mills, extruders and moulding presses resulting in thermal decomposition, fire or explosion • Failure of controls on meter mixer urethane systems leading to incorrect ratios, exothermic reactions and off-gassing • Inadequate process descriptions, safe operating limits and alarm/trip settings for critical rubber and composite processing equipment • Lack of documented pr[illegible]es for abnormal operations[illegible]art-up, shutdown and emergency sit[illegible]ions in mills, extruders and pres[illegible]s • Insufficient verificati[illegible] of safety instrumented functions and interlock[illegible]on moulding presses, curing ovens [illegible] extruder lines • Poor management of utilities (steam, compressed air, hydraulics, electricity) integral to process safety performance	4[illegible]	[redacted]	2M
7. Maintenance, Isolation and Contractor Management	• Unplanned maintenance and breakdown response on mills, presses, extruders, granulators and cutting machines undertaken without effective isolation • Contractors performing high-risk work (e.g. electrical, fabrication, confined space, hot work) without integration into site WHS systems	4A	[redacted]	2M

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	• Inadequate maintenance planning leading to deferred inspection of critical safety systems and resulting in plant failures • Poor communication and coordination between in-house teams and contractors performing concurrent work on the same equipment • Lack of verification of contractor competence, licences and insurances • Incomplete handover and recommissioning processes after major repairs or modifications		[redacted]	
8. Workplace Design, Traffic Management and Material Flow	• Congested production areas with conflicting flows of people, forklifts and manual handling equipment between fabric cutting, sewing, mills, extruders, presses and granulators • Inadequate segregation of pedestrian walkways from mobile plant routes, particularly near loading of rubber bale fabric rolls and finished composite products • Poor layout leading trip hazards from hoses, electrical le s and offcuts around cutting ma ines, sew stations and rolling • Lack of structured design review w n introducing new plant or process causing bottlenecks and material handling practices • Insufficient lighting and signage in key areas, including around emergency exits, storage areas and rumblers	H	[redacted]	1L
9. Training, Competency and Supervision	• Workers operating complex plant (mills, extruders, moulding presses, granulators, meter mixers, cutting and sewing machines) without formal competency verification • Inadequate induction and site-specific WHS training for new starters, labour hire staff and contractors	3H	[redacted]	1L

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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
	• Supervisors lacking skills to identify unsafe behaviours, manage fatigue and enforce safe work procedures • Insufficient refresher training for infrequently performed or high-risk tasks (e.g. changeovers, cleaning inside guarded areas, resin system changeovers) • Language, literacy and cultural barriers leading to misunderstanding of instructions, signage and procedures		[redacted]	
10. Fatigue, Shift Work and Psychosocial Risk Management	• Extended hours and shift work in continuous processing of rubber and composite materials leading to fatigue and reduced alertness • Production pressure and tight deadlines for furniture parts and textile orders affecting decision-making and safety compliance • Low worker involvement in decision-making and limited consultation contributing to stress and reduced reporting of hazards • Insufficient syste[redacted]o manage psychosocial haza[redacted]s including b[redacted]lying, role conflict and jo[redacted] sec[redacted] a l[redacted]ed labour hire and perma[redacted]t workforce • Inadequate consideration of men[redacted] health and wellbeing with[redacted] systems	[redacted]	[redacted]	2M
11. Emergency Preparedness, Fire and Explosion Management	• Inadequate planning for fires involving rubber stock, composite resins, textiles and flammable/combustible liquids • Insufficient emergency equipment and training for chemical spills, resin leaks and isocyanate releases from meter mixer systems • Blocked or poorly marked emergency exits around presses, mills, fabric cutting machines and sewing lines • Lack of coordination of emergency response with neighbouring businesses,	4A	[redacted]	2M

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	emergency services and other PCBUs on shared sites • Failure to consider specific emergency scenarios such as dust explosions, curing oven fires or electrical faults in high-load machinery		[redacted]	
12. Health Monitoring, Exposure Surveillance and Injury Management	• Lack of systematic health monitoring for workers exposed to hazardous chemicals such as isocyanates and other sensitising agents used in urethane and composite processing • No structured programme for audiometric testing for workers exposed to noise from granulators, mills, presses, rumblers and cutting machinery • Inadequate systems to track early signs of musculoskeletal disorders in sewing, cutting and manual handling roles • Poor return-to-work and [illegible] management proces[illegible] leading to prolonged harm an[illegible] recurrence of injuries • Failure to use health and exposure data to inform risk assessments and control improvements	3H	[redacted]	1L
13. Procurement, Design and Change Management for Materials and Processes	• Procurement of plant, tools, resins, rubber compounds and composite materials without WHS input, resulting in inherently higher risk equipment or substances • Changes to materials (e.g. new resin systems, glass-fibre types, fillers) without risk assessment of their health and process safety implications • Introduction of new processes such as improved casting or new rolling/stringing techniques without structured change management	3H	[redacted]	1L

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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
	• Failure to consider whole-of-life safety impacts (installation, operation, maintenance, decommissioning and disposal) during design and procurement decisions • Inadequate communication of process changes to operators, maintenance personnel and contractors		[redacted]	
14. Document Control, Records and Continuous Improvement	• Outdated or inconsistent procedures for plant operation, resin handling, sewing operations and emergency response available on the floor • Loss or misplacement of critical records such as risk assessments, training records, maintenance logs, SDS and inspection reports • Lack of structured review of incidents, near misses and non-conformances to prevent recurrence • Poor version control leading to multip differing instructions for the same task process • Limited manageme visibility of trends and systemic issu affecting WHS performance	3H	[redacted]	1L

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