Sheet Metal Machinery Guillotines Folders and Rollers			
Business Name:		ABN:	
Business Address:			
Contact Person:	Phone:	Email:	

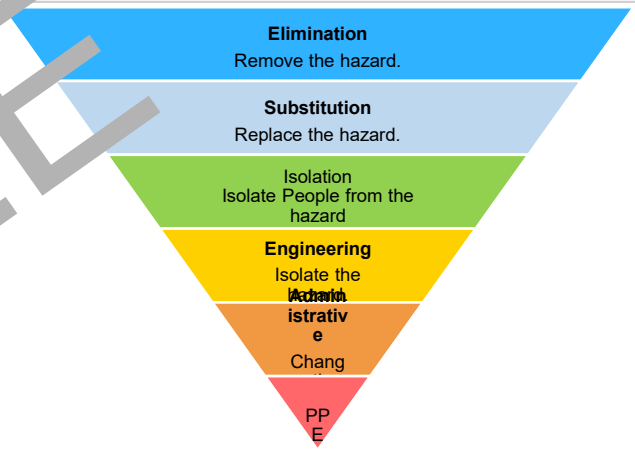
THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE PROJECT		
Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.		
Full Name:		
Signature:	Title:	Date:

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. Governance, WHS Duties and Legal Compliance	• Lack of clearly defined WHS roles, responsibilities and due diligence for PCBUs and officers under WHS Act 2011 • Inadequate oversight of high-risk plant such as guillotines, press brakes, power flangers and powered curving rolls • Failure to identify and register applicable plant that meets the definition of registrable plant • Non-compliance with WHS Regulations and relevant Codes of Practice for managing risks of plant in the workplace • Inadequate consultation with workers and Health and Safety Representatives about sheet metal machinery risks and controls • No formal process to review changes in legislation, standards and manufacturer requirements for metalworking plant	4A	• Establish and document a WHS governance framework that allocates WHS Act 2011 duties, accountabilities and reporting lines for all levels of management in relation to sheet metal machinery • Implement a formal legal compliance register covering WHS Act, WHS Regulation, and relevant Australian Standards for powered guillotines, folders, rollers, press brakes, metal shears and associated plant • Ensure officers exercise due diligence by regularly reviewing WHS performance data specific to metal fabrication and cutting operations, including serious incident investigations and near-miss trends • Undertake plant registration and notification processes where required, maintaining evidence of registration and manufacturer technical documentation for all relevant machinery • Develop a documented WHS policy that specifically references management of high-risk sheet metal machinery and is communicated to all employees and contractors • Implement a structured consultation process (toolbox talks, WHS committee meetings, pre-change consultations) that specifically considers risks associated with guillotines, panbrakes, roll forming lines and metal shearing machines • Schedule formal, periodic WHS compliance audits that include verification of machine guarding, emergency stop systems, isolation procedures, and training for all sheet metal plant • Maintain a change-management procedure requiring WHS risk review prior to procurement, modification or relocation of any sheet metal machinery, including custom-made panel fabrication equipment • Require documented officer-level review and sign-off on high-risk plant risk assessments and associated safe systems of work at least annually or after significant incidents	2M
2. Plant Procurement, Design and Commissioning	• Purchase of guillotines, press brakes, panbrakes, roll benders and metal shears that are not designed to current Australian Standards • Imported or custom-built plant lacking adequate guarding, emergency stops or interlocks • Inadequate pre-purchase risk assessment that fails to consider sheet size, thickness, throughput and pinch/crush points for curving rolls and slitter-folders • Failure to ensure compatibility of new machinery with existing electrical supply, extraction systems and floor loading capacity • Lack of documented commissioning process to verify safety functions, guarding and safety control systems	4A	• Implement a formal pre-procurement risk assessment process for all new or second-hand sheet metal machinery, including guillotines, press brakes, metal plate rolling machines, metal slitting machines and snap lock machines • Specify compliance with relevant Australian Standards, WHS Regulation requirements and machine-specific safety requirements in all purchase contracts and supplier agreements • Require suppliers to provide documented evidence of conformity, including CE or equivalent certifications, guarding design, emergency stop layout and safety control system category where applicable • Ensure all powered machinery (e.g. hydraulic panbrakes, power flange machines, roll formers, metal slitting machines, powered curving rolls) are supplied with fixed guards, interlocked access points and clearly marked danger zones • Include WHS and engineering representatives in procurement decisions to evaluate ergonomic suitability, noise levels, dust and fume generation, and manual handling impacts for handling large metal sheets and decks • Develop a formal commissioning checklist that verifies emergency stops, interlocks, guarding, two-hand controls on appropriate machines, and integrity of control circuitry before first use	2M

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	• Failure to obtain and retain operator manuals, maintenance instructions and safety data from suppliers		• Require a written commissioning report and handover from the installer or supplier, including parameter settings, safe operating limits and maintenance schedules for each specific machine type (e.g. metal flanging machine, swage and jenny, nibbler) • Ensure all operating and maintenance manuals, drawings and safety instructions are obtained, catalogued and made readily accessible to supervisors and authorised operators • Prohibit use of any new sheet metal machinery until commissioning has been signed off by a competent person and a high-level WHS risk assessment has been updated	
3. Plant Layout, Traffic Management and Work Environment	• Poor workshop layout causing congestion around guillotines, folders, rollers and press brakes, increasing collision and entrapment risks • Inadequate clearance around sheet metal shearing and rolling operations leading to unsafe handling of long, sharp sheets • Uncontrolled interaction between pedestrians, forklifts and trolleys transporting plate and coil to metal slitting machines and roll formers • Insufficient lighting at cutting lines and control panels causing errors and misjudgement during alignment and measurement • Inadequate floor condition or uneven surfaces around machines increasing slip, trip and fall risk while handling heavy sheets • Lack of dedicated storage areas for offcuts, curved sections and scrap, leading to clutter and impalement hazards • Excessive noise levels from shearing, nibbling and forming operations affecting communication and concentration	4A	• Develop a documented plant and traffic management plan that defines machinery positioning, pedestrian walkways, exclusion zones and forklift routes for all sheet metal production areas • Ensure adequate working clearances around guillotines, shears, panbrakes, roll bending machines and press brakes to safely feed, support and remove full-size sheets without overreaching or twisting • Mark and enforce no-go zones around high-risk pinch and shear areas on powered curving rolls, roll formers and metal plate rolling machines using floor markings and physical barriers where practicable • Provide task-appropriate lighting at workstations, especially at cutting lines, squaring arms, backgauges and control interfaces to minimise misalignment and mis-cutting • Maintain floors in good repair, ensure non-slip surfaces where necessary and keep pathways around machinery free from oil, swarf, scrap and offcut build-up through documented housekeeping standards • Implement dedicated storage systems for raw sheet, metal decking, curved sections and scrap (racks, stillages, bins) and integrate these into layout design to avoid ad hoc stacking • Establish a noise management plan including noise assessments, engineering controls such as acoustic barriers or damping, and administrative controls such as time limits in high-noise zones • Designate and signpost loading and unloading areas for long sheet and coil handling, ensuring these are separated from fixed operating positions of guillotines and folders • Review layout whenever new plant such as snap lock machines, joint profile rollsets or lock seamers are introduced to ensure system-wide risk remains controlled	2M
4. Guarding, Interlocks and Safety Control Systems	• Inadequate or missing fixed guards on guillotines, metal shears and metal slitting machines exposing operators to shear blades • Defeated or bypassed interlocks on access panels and guards of powered rolls, press brakes and roll formers	4A	[redacted]	2M

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	• Ineffective or poorly placed light curtains, presence-sensing devices or two-hand controls on high-risk machinery • Lack of regular testing and verification of emergency stop devices and safety circuits • Uncontrolled modification of control systems, e.g. adding foot pedals or hand controls without risk assessment • Guarding that impedes visibility or workflow, encouraging operators to remove or prop open guards		[redacted]	
5. Energy Isolation, Lockout and Plant Access	• Uncontrolled release of hazardous energy (electrical, hydraulic, pneumatic, mechanical) during maintenance or clearing of jams in guillotines and metal slitting machines • Failure to isolate and lockout powered rolls, swage and jenny machines, metal plate rolling equipment or press brakes during cleaning or adjustment • Lack of clearly labelled isolation points and procedures for complex plant lines such as roll formers and slitter-folders • Unauthorised access to restricted areas behind guards, within roll lines or underneath elevated panels during maintenance or setup • Inadequate verification of zero-energy state before accessing nip points, shear blades or tooling areas	4A	[redacted]	2M

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			[redacted]	
6. Competency, Training and Authorisation	• Inadequate competence of operators using guillotines, metal shearing machines, roll benders, power flangers and press brakes • Lack of structured training in safe setup, adjustment and fault response for complex machinery such as roll formers and lock seamers • Supervisors unable to recognise unsafe practices or non-compliant machine configurations • Use of untrained labour hire or contractors on high-risk plant such as hydraulic panbrakes, metal plate roller and metal slitting lines • Insufficient training on hazards associated with sheet handling, sharp edges and flying offcuts during sheet metal shearing and cutting • No refresher training following incidents, near misses or equipment upgrades	4A	[redacted]	2M
7. Safe Operating Procedures and Work Instructions	• Absence of clear, standardised safe operating procedures (SOPs) for different categories of sheet metal plant • Reliance on informal practices or verbal instructions for operating guillotines, panbrakes, roll benders and metal slitting equipment • Inconsistent setup and adjustment processes leading to misalignment, jams and unplanned interventions near moving parts • No documented limits or parameters for sheet thickness, length, material type	3H	[redacted]	2M

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	or tooling compatibility, increasing overload and ejection risks • Failure to integrate emergency response steps and abnormal condition handling into everyday work instructions		[redacted]	
8. Maintenance, Inspection and Plant Integrity	• Inadequate planned maintenance of guillotines, shears, rollers, press brakes and folders leading to mechanical failure • Failure to maintain blade sharpness and alignment, increasing force requirements, misfeeds and risk of shee kickback • Unreliable or unte ed emergency stops, interlocks a safety circui due to lack of regular in ecti • Use of incorrect or worn tooling on press brakes, panbrakes and roll formers resulting in crack tion or deformation of metal parts • Absence of defect reporting and rectification system leading to use of unsafe plant • Use of makeshift repairs or non-genuine parts that compromise safety performance	4A	[redacted]	2M
9. Materials Handling, Storage and Manual Handling Systems	• Unsafe manual handling of large, heavy or flexible sheet metal during	3H		2M

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	feeding and removal from guillotines, folders and rollers • Poorly designed storage for sheet, plate, metal decking and coil leading to collapse, sliding or sudden movement • Inadequate mechanical aids for moving sheets to and from metal plate rolling machines, roll formers and press brakes • High-force pushing or pulling of sheets through hand-operated curving rolls, roll benders and manual panbrakes causing musculoskeletal injuries • Lack of system to manage sharp offcuts, scrap and trimmed edges leading to laceration injuries		[redacted]	
10. Tooling, Consumables and Changeover Management	• Incorrect selection or installation of blades, punches, dies and forming rolls for the metal type and thickness being processed • Uncontrolled tooling changeover on guillotines, press brakes, folding machines, flanging machines and roll benders exposing workers to sharp edges and crush points • Use of damaged or incompatible rivet guns, nibbler bits or swaging tools causing kickback or ejected components • Lack of traceability or identification of tooling condition and service history • Time pressure during tooling change leading to bypass of isolation and guarding requirements	3H	[redacted]	2M

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			[redacted]	
11. Hazardous Substances, Noise and Environmental Conditions	• Exposure to metal dust, fumes and aerosols generated during cutting, nibbling, shearing and forming operations • High noise levels from guillotines, shears, nibblers, slitting lines and press brakes leading to hearing damage and communication difficulties • Contact with lubricants, hydraulic oils and coolants used on sheet metal machinery • Inadequate ventilation or extraction around areas where cutting, trimming and forming operations generate fine particulates • Heat stress in poorly ventilated workshops with hi[redacted]machiner[redacted]and manual handling o[redacted]terials	3H	[redacted]	2M
12. Contractor, Visitor and Third-Party Management	• Contract maintenance or installation workers unfamiliar with site-specific sheet metal machinery hazards and controls • Visitors or customers entering operational areas near guillotines, roll formers and press brakes without awareness of exclusion zones • Inadequate supervision of specialist contractors modifying plant controls, guards or layouts	3H	[redacted]	1L

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	• Lack of integration of contractor work into site isolation, permit and emergency procedures		[redacted]	
13. Fatigue, Work Scheduling and Supervision	• Extended shifts or high workloads leading to fatigue in operators of guillotines, metal shears, roll formers and press brakes • Inadequate supervision during night shifts or weekend work where complex sheet metal machinery is operating • Production targets and deadlines encouraging rushed work, bypassing of safeguards or poor decision-making • Insufficient breaks during repetitive, high-concentration tasks such as continuous sheet shearing, slitting or riveting	3H	[redacted]	2M
14. Emergency Preparedness, Incident Response and First Aid	• Delayed or ineffective response to entanglement, amputation or crush injuries at guillotines, rollers and presses • Lack of clearly accessible emergency stop devices and isolation points known to all workers • Inadequate first aid capacity for lacerations, puncture wounds and crush injuries common to sheet metal work • Poor incident reporting and investigation processes resulting in repeated systemic failures	3H	[redacted]	2M

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			[redacted]	
15. Continuous Improvement, Consultation and Monitoring	• Stagnant WHS practices that do not keep pace with changes in technology, production methods or workforce profile • Lack of worker input into risk control effectiveness for guillotines, folders, rollers and associated plant • Failure to monitor leading indicators such as near misses, hazards reported and audit findings • Ineffective communication of lessons learned from incidents or external alerts	2M	[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 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