UC SANTA BARBARA Environmental Health & Safety Design, Facilities & Safety Services Title: Shop Equipment Hazard Analysis & Management Form		Procedure No.: SS-MHA-LATHE-MTL
		Authorized/Approved By: John M. Seaman, EHS Industrial Safety Manager
Issue Date: 05/07/2013	Review Date: 10/05/2021	Page Number: 1 of 4

1. Hazard Management Details - General				
Shop/Equipment Item:	Make/Model No.:		Serial No.:	
METAL LATHE				
Department:	Work Location:			
Person(s) Conducting Hazard Analysis: JOHN M. SEAMA			ate Conducted:	
EHS, Industrial S				
Equipment Photo:	Description of Use: Summary of Key Risks: (refer to appropriate subsections)			
	A metal lathe is a specialized piece of plant equipment used to machine wood by removing material from a rotating work piece via the movement of various cutting pieces (i.e. tool bits, drill bits).		 Entanglement Inhalation Eye Injury Trauma-(Impact and Cutting) Foot Injury Electrical Shock 	

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2. Documentation:				
Relevant Legislation/Standards Y / N		Comments:		
a. Is equipment required to be registered?	Y N 🔀			
b. Is a user license/Certification required?	Y N			
c. Key Reference Materials Required:	AS 4024 Safety of machinery - Materials cutting - Milling machines (including boring machines) - Safety requirements AS/NZS 3760 In service safety inspection and testing of electrical equipment AS 4024 Safeguarding of machinery			
Equipment Documentation	Y / N	Comments:		
a. Are operator's manuals accessible?	Y N			
b. Is this a restricted use item?	Y 📉 N 🗌			
c. Does this equipment require safe use document(s)/test?	Y 📉 N 🗌			

	3. Personal Protective Equipment (PPE) Required (Check the box for required PPE)						
Gloves	Face Masks	Eye Protection	Face Shield	Hearing Protection	Safety Footwear	Protective Clothing	Welding Mask
	OPTIONAL		OPTIONAL		\square		

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4. Hazard Analysis			
TASK	HAZARD	CAUSE	PREVENTIVE MEASURE
a. Routine Operation	Entanglement	Long hair, loose clothing, rags, cleaning brushes and jewelry could become entangled in the moving parts of the saw.	Make sure hair, loose clothing, & rags are kept clear of moving parts when in use. Hair ties/hair nets can be used to secure long hair. Aprons can be used to restrict loose clothing. Remove jewelry/accessories prior to operating equipment.
	Inhalation	Dust/particles generated during machine operation	Appropriate natural ventilation, use of disposable respirators
	Eye Injury	Projectiles, dust/particles	Safety glasses w/side shield, goggles, face shield
	Trauma (Impact & Cutting)	The exposed moving parts present a risk to an operator's hands and body parts. Projectiles, rotating parts, point of operation, ingoing nip points, flying chips and sparks	Make sure operator hands and body parts are kept clear of moving parts during operation and maintenance. Make sure work pieces are appropriately secured prior to operation and key is removed from chuck
	Foot Injury	Drop object on foot	Wear safety shoes/boots
	Electrical Shock	Improper grounding, operation, or maintenance, damaged electrical cords	Proper grounding of frame, manufacturer's instructions strictly followed, inspect cords
b. Routine Maintenance/Repair	Trauma	Uncontrolled/unexpected start- up of machine	Make sure equipment is serviced on a regular basis, tested & tagged .Use appropriate energy isolation procedures prior to beginning maintenance work
c. Shutdown and Isolate Unit	Electrical Shock/Laceration	Failure to follow Lockout/Tagout procedures	Strictly adhere to established Lockout/Tagout protocols

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Equipment Procedures/ Requirements

- 1. Operate equipment in strict accordance with Manufacturer's instructions and in accordance with OSHA 29 CFR 1910.212 and 1910.213.
- 2. Only authorized users can operate equipment.
- 3. A mechanical or electrical power control shall be provided to make it possible for the operator to cut off power without leaving his position at the point of operation.
- 4. All belts, pulleys, gears, shafts shall be guarded in accordance with the requirements of OSHA 29 CFR 1910.219.
- 5. Machines designed for a fixed location shall be securely anchored to prevent walking or moving.
- 6. One or more methods of machine guarding shall be provided to protect the operator and others in the area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips
- 7. Ensure the work piece has been suitable prepared for the lathe operation. Work piece must be securely fastened to face plate, chuck or between centers.
- 8. Start the dust extraction unit before using the lathe.
- 9. Report any observed defect or safety hazard to your supervisor immediately.
- **10.** Where any object handled would possibly cause injury to feet if dropped, safety shoes will be worn.
- **11.** Keep hands, hair and loose clothing clear of all moving parts.

12. <u>NEVER OPERATE LATHE ALONE</u> - Shop access outside of supervised hours may be restricted to specific "Authorized Persons" based upon the Shop Manager's discretion. This access is not granted for regular on-going work. Routine working solo outside of 'supervised hours' is strictly forbidden and will result in an immediate revocation of shop privileges. *Authorized Person(s)" may work solo in a Shop during 'supervised hours' when communications means and / or other arrangements are made with the Shop Manager / Supervisor to assure the person's continuous safety and ability to communicate immediately with emergency responders prior to solo-work starting.*