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| 1. Hazard Management Details – General |
| **Plant/Equipment Item: Bobbin Sander**  | **Make/Model No.:**  | **Serial No.:**  |
| **School / Work Location:**  | **Region:**  |
| **Name of Person(s) Conducting Activity:** | **Date Conducted:**       |
| Bobbin Sander | **Description of Use:** A bobbin sander is a machine which has a revolving vertical abrasive spindle used to sand down wood and other materials for finishing purposes. | **Summary of Key Risks:** **(refer to appropriate subsections)** * Entanglement
* Impact and cutting
* Electricity
* Noise
* Friction
* Slips/trips/falls
* Other (dust)
 |

Plant and Equipment Risk Management Form

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| 2. Documentation |
| **Relevant Legislation/Standards** | **Y / N** | **Comments** |
| **Is plant required to be registered?** | Y [ ]  N[x]   |  |
| **Is a user license required?** | Y [ ]  N[x]   |  |
| **Key Reference material**  |  | AS 1473 Guarding and safe use of woodworking machineryAS 4024.1 Safety of machinery AS/NZS 3760 In service safety inspection and testing of electrical equipment |
| **Plant Documentation** | **Y / N** | **Comments** |
| **Are operator’s manuals accessible?** | Y [x]  N[ ]   |  |
| **Is this a restricted use item?** | Y [ ]  N[x]   |  |
| **Does this item require safe use documents/test?** | Y [ ]  N[x]   |  |

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| 3. Hazard Identification |  |
| **Hazards Inspected** | **Risk Assessment** | **Description of Risk** | **Control Measures** |
|  | **Cons** | **Like** | **Risk****Level** |  |  |
| **ENTANGLEMENT**Can anyone’s hair, clothing, gloves, cleaning brushes, tools, rags or other materials become entangled with moving parts of the plant or materials? | Y [x]  N[ ]  | Major | Possible | High  | Long hair, loose clothing, rags, cleaning brushes and jewellery could become entangled in the moving parts of the belt sander. | Ensure hair, loose clothing, rags and jewellery is kept clear of moving parts when in use.* Aprons can be used to restrict loose clothing.
* Hair ties/hair nets can be used to secure long hair.

Ensure inappropriate jewellery and accessories (e.g. bracelets) are removed prior to operation. |

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| Hazards Inspected | Risk Assessment | Description of Risk | Control Measures |
|  | **Cons** | **Like** | **Risk****Level** |  |  |
| **IMPACT AND CUTTING INJURIES**Can anyone be crushed/cut/struck etc. due to: |  |  |  |  | Abrasive spindle may disintegrate if poorly maintained, work piece has foreign bodies (e.g. nails), has not installed appropriately or incorrect spindle being used.Work pieces may be ejected at high speed. | Ensure abrasive spindle is inspected prior to use, appropriate for purpose and is fitted in accordance with manufacturer’s instructions.Ensure appropriate PPE (e.g. eye protection) is worn when operating equipment. |
| * Material falling off the plant?
 | Y [ ]  N[x]  |  |  |  |
| * Uncontrolled/unexpected movement of plant/load?
 | Y [ ]  N[x]  |  |  |  |
| * Lack of capacity to slow, stop or immobilise plant?
 | Y [ ]  N[x]  |  |  |  |
| * The plant tipping or rolling over?
 | Y [ ]  N[x]  |  |  |  |
| * Parts of the plant disintegrating or collapsing?
 | Y [x]  N[ ]  | Moderate | Possible | Medium  |
| * Contact with moving parts during testing, inspection, operation, maintenance, cleaning or repair?
 | Y [x]  N[ ]  | Major | Possible | High |
| * Being thrown off or under the plant?
 | Y [ ]  N[x]  |  |  |  |
| * Contact with sharp or flying objects? (e.g. work pieces being ejected)
 | Y [x]  N[ ]  | Moderate | Likely | High |
| * The mobility of the plant?
 | Y [ ]  N[x]  |  |  |  |
| * Inappropriate parts and accessories being used?
 | Y [x]  N[ ]  | Moderate | Unlikely | High |
| * Other
 | Y [ ]  N[x]  |  |  |  |

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| Hazards Inspected | Risk Assessment | Description of Risk | Control Measures |
|  | **Cons** | **Like** | **Risk****Level** |  |  |
| **SHEARING**Can anyone’s body parts be sheared between two parts of plant, or between a part of the plant and a work piece or structure? | Y [ ]  N[x]  |  |  |  |  |  |
| **PRESSURISED CONTENT**Can anyone come into contact with fluids or gases under high pressure, due to plant failure or misuse of the plant? | Y [ ]  N[x]  |  |  |  |  |  |
| **ELECTRICITY**Can anyone be injured or burnt due to: |  |  |  |  | Damaged or frayed electrical cords pose an electrical hazard. | Operator to check for damaged electrical cords prior to use.Ensure equipment is serviced on a regular basis, tested and tagged and appropriate isolation procedures (e.g. lock out tags) are in place. |
| * Live electrical conductors? (*e.g.* exposed wires)
 | Y [ ]  N[x]  |  |  |  |
| * Working in close proximity to electrical conductors?
 | Y [ ]  N[x]  |  |  |  |
| * Access to electricity?
 | Y [ ]  N[x]  |  |  |  |
| * Damaged or poorly maintained electrical leads, cables or switches?
 | Y [x]  N[ ]  | Major | Unlikely | Medium |
| * Water near electrical equipment?
 | Y [ ]  N[x]  |  |  |  |
| * Lack of isolation procedures?
 | Y [ ]  N[x]  |  |  |  |
| * Other
 | Y [ ]  N[x]  |  |  |  |

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| Hazards Inspected | Risk Assessment | Description of Risk | Control Measures |
|  | **Cons** | **Like** | **Risk****Level** |  |  |
| **ERGONOMICS**Can anyone be injured due to: |  |  |  |  | Lifting items in and out of the kiln may pose a manual handling hazard. | Ensure appropriate manual handling techniques are applied when handling material. |
| * Poorly designed workstation?
 | Y [ ]  N[x]  |  |  |  |
| * Repetitive body movement?
 | Y [ ]  N[x]  |  |  |  |
| * Constrained body posture or the need for excessive effort?
 | Y [x]  N[ ]  | Moderate | Possible | Medium |
| * Design deficiency causing psychological stress?
 | Y [ ]  N[x]  |  |  |  |
| * Inadequate or poorly placed lighting?
 | Y [ ]  N[x]  |  |  |  |
| * Does the plant impact on the surrounding workplace and create potential hazards? (Consider potential impact on the design and layout of the workplace)
 | Y [ ]  N[x]  |  |  |  |
| * Is the location of the plant inappropriate? (Consider potential effects due to environmental conditions and terrain)
 | Y [ ]  N[x]  |  |  |  |
| * Other
 | Y [ ]  N[x]  |  |  |  |

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| Hazards Inspected | Risk Assessment | Description of Risk | Control Measures |
|  | **Cons** | **Like** | **Risk Level** |  |  |
| **RADIATION**Can anyone using the plant, or in the vicinity of the plant suffer injury or illness due to exposure to radiation in the form of any of the following:* infra-red radiation
* ultra violet light
* microwaves
 | Y [ ]  N[x]  |  |  |  |  |  |
| **NOISE**Can anyone using the plant, or in the vicinity of the plant, suffer injury due to exposure to noise? | Y [x]  N[ ]  | Minor | Possible | Medium | Operation of the equipment can result in high noise levels. | Appropriate hearing protection (e.g. ear muffs) should be worn whilst operating the equipment. |
| **VIBRATION**Can anyone be injured or suffer ill-health from exposure to vibration? | Y [ ]  N[x]  |  |  |  |  |  |
| **FRICTION**Can anyone be burnt due to contact with moving parts, materials or surfaces of the plant? | Y [x]  N[ ]  | Minor | Possible | Medium | Operator could sustain a friction injury if hand or body parts come into contact with the spindle. | Ensure operator is appropriately trained and/or supervised in the safe use of the equipment. |
| **SUFFOCATION**Can anyone be suffocated due to lack of oxygen, or atmospheric contamination?  | Y [ ]  N[x]  |  |  |  |  |  |
| **CONDITION**Is a hazard likely due to the age and condition of the plant? (*Consider how hard the machine has been worked, and whether it is used constantly or rarely).* | Y [ ]  N[x]  |  |  |  |  |  |
| Can anyone be injured as a result of the plant not serviced appropriately and/or maintained in line with manufacturer’s recommendations? | Y [ ]  N[x]  |  |  |  |

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| Hazards Inspected | Risk Assessment | Description of Risk | Control Measures |
|  | **Cons** | **Like** | **Risk****Level** |  |  |
| **SLIPS/TRIPS/FALLS**Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to: |  |  |  |  | Poor housekeeping practices allowing the build-up of waste materials or failure to immediately clean up spills could result in a slip hazard.Inappropriate placement of objects (e.g. spare material, electrical cords, bags etc.) in the immediate vicinity of the equipment may result in a trip hazard. | Ensure appropriate cleaning and housekeeping practices are maintained to minimise the risk of a slip/trip/falls hazard. |
| * Uneven, slippery or steep work surfaces?
 | Y [ ]  N[x]  |  |  |  |
| * Poor housekeeping, e.g. spillage in the vicinity?
 | Y [x]  N[ ]  | Minor | Possible | Medium |
| * Obstacles being placed in the vicinity of the plant?
 | Y [x]  N[ ]  | Minor | Possible | Medium |
| * Inappropriate or poorly maintained floor or walking surfaces (i.e. lack of a slip-resistant surface, unprotected holes, penetrations or gaps?)
 | Y [ ]  N[x]  |  |  |  |
| If operating or maintaining plant at height can anyone slip, trip or fall due to: |  |  |  |  |
| * Use of work platforms, stairs or ladders?
 | Y [ ]  N[x]  |  |  |  |
| * Lack of guardrails or other suitable edge protection?
 | Y [ ]  N[x]  |  |  |  |
| * Other
 | Y [ ]  N[x]  |  |  |  |

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| Hazards Inspected | Risk Assessment | Description of Risk | Control Measures |
|  | **Cons** | **Like** | **Risk****Level** |  |  |
| **FIRE AND EXPLOSION**Can anyone be injured by fire? | Y [ ]  N[x]  |  |  |  |  |  |
| * Can anyone be injured by explosion of gases, vapours, liquids, dusts, or other substances?
 | Y [ ]  N[x]  |  |  |  |
| **TEMPERATURE/MOISTURE**Can anyone come into contact with objects athigh or low temperatures? | Y [ ]  N[x]  |  |  |  |  |  |
| * Can anyone suffer ill-health due to exposure to high or low temperatures?
 | Y [ ]  N[x]  |  |  |  |
| * Can anyone be injured or suffer ill-health due to exposure to moisture?
 | Y [ ]  N[x]  |  |  |  |
| **OTHER**Can anyone be injured or suffer ill-health from exposure to: |  |  |  |  | Dust generated from the work process may be hazardous to health. | Ensure appropriate control measures are implemented (e.g. local exhaust system, face masks, good housekeeping practices etc.). |
| * Chemicals?
 | Y [ ]  N[x]  |  |  |  |
| * Toxic gases or vapours?
 | Y [ ]  N[x]  |  |  |  |
| * Fumes/Dusts?
 | Y [x]  N[ ]  | Moderate | Unlikely | Medium |
| * Other? (please specify)
 | Y [ ]  N[x]  |  |  |  |
| **4. Risk Assessment Signoff** |
| Authorised By:       | Signature: | Date:       |

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| Consequence - Evaluate the consequences of a risk occurring according to the ratings in the top row

|  |  |  |
| --- | --- | --- |
| Descriptor | Level | Definition |
| **Insignificant** | **1** | No injury |
| **Minor** | **2** | Injury/ ill health requiring first aid |
| **Moderate** | **3** | Injury/ill health requiring medical attention |
| **Major** | **4** | Injury/ill health requiring hospital admission |
| **Severe** | **5** | Fatality |

3. Risk level - Calculate the level of risk by finding the intersection between the likelihood and the consequences

|  |  |
| --- | --- |
| Likelihood | Consequence |
| **Insignificant** | **Minor** | **Moderate** | **Major** | **Severe** |
| **Almost Certain** | Medium | High | Extreme | Extreme | Extreme |
| **Likely** | Medium | Medium | High | Extreme | Extreme |
| **Possible** | Low | Medium | Medium | High | Extreme |
| **Unlikely** | Low | Low | Medium | Medium | High |
| **Rare** | Low | Low | Low | Medium | Medium |

  | Likelihood - Evaluate the likelihood of an incident occurring according to the ratings in the left hand column

|  |  |  |
| --- | --- | --- |
| Descriptor | Level | Definition |
| **Rare** | **1** | May occur somewhere, sometime (“once in a life time / once in a hundred years”) |
| **Unlikely** | **2** | May occur somewhere within the Department over an extended period of time |
| **Possible** | **3** | May occur several times across the Department or a region over a period of time |
| **Likely** | **4** | May be anticipated multiple times over a period of timeMay occur once every few repetitions of the activity or event |
| **Almost Certain** | **5** | Prone to occur regularlyIt is anticipated for each repetition of the activity of event |

4. Risk Level/Rating and Actions

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| Descriptor | Definition |
| **Extreme:** | Notify **Workplace Manager and/or Management OHS Nominee** immediately. Corrective actions should be taken immediately. Cease associated activity. |
| **High:** | Notify **Workplace Manager and/or Management OHS Nominee** immediately. Corrective actions should be taken within 48 hours of notification. |
| **Medium:** | Notify **Nominated employee, HSR / OHS Committee**. Nominated employee, OHS Representative / OHS Committee is to follow up that corrective action is taken within 7 days. |
| **Low** | Notify **Nominated employee, HSR / OHS Committee**. Nominated employee, HSR / OHS Committee is to follow up that corrective action is taken within a reasonable time. |

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