|  |
| --- |
| 1. Hazard Management Details – General |
| **Plant/Equipment Item: Nibbler (Portable)** | **Make/Model No.:**  | **Serial No.:**  |
| **School / Work Location:**  | **Region:**  |
| **Name of Person(s) Conducting Activity:** | **Date Conducted:**       |
| Nibbler - Portable  http://www.plumbersurplus.com/images/prod/5/Bosch-1529B-rw-80739-148363.jpg | **Description of Use:** A nibbler is a specialised piece of equipment for the cutting-out of irregular shapes. The nibbler works by punching a distortion-free straight and/or curved cut into plastic or sheet metal. | **Summary of Key Risks:** **(refer to appropriate subsections)*** Entanglement
* Impact and cutting
* Electricity
* Ergonomics
* Noise
* Slips/trips/falls
* Temperature
 |

Plant and Equipment Risk Management Form

|  |
| --- |
| 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 equipmentAS/NZS 60745.1 Hand-held motor-operated electric tools - Safety - General requirements |
| **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 [x]  N[ ]   |  |

|  |  |
| --- | --- |
| 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[ ]  | Moderate | Possible | Medium  | Long hair, loose clothing, rags, cleaning brushes and jewellery could become entangled in moving parts. | Ensure hair, loose clothing, rags etc. 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 jewellery and accessories (e.g. bracelets) are not worn when operating equipment.
 |

|  |  |  |  |
| --- | --- | --- | --- |
| Hazards Inspected | Risk Assessment | Description of Risk | Control Measures |
|  | **Cons** | **Like** | **Risk****Level** |  |  |
| **IMPACT AND CUTTING**Can anyone be crushed/cut/struck etc. due to: |  |  |  |  | The moving parts present a significant risk to an operator’s hands and body parts.Selecting the incorrect cutter bit can cause the bit to kick back and move the work piece.Failure to switch off and isolate the power of the machine prior to changing cutter bit, and or cleaning, adjusting, maintaining or repairing the machine could result in injury.Failure to switch off machine before removing waste material from the bench could result in injury. | Ensure operator understands the task and has been trained in safe work practice.Keep hands clear of work piece and away from cutter bit. Ensure work pieces are appropriately secured prior to cutting. Ensure the correct cutter bit is installed to thickness of sheet metal.Ensure eye and clothing protection and appropriate footwear is worn prior to operation.Switch off nibbler before removing waste material from the table (e.g. metal swarf) from the bench.Ensure Safe Work Procedure (SWP) is developed and displayed on or next to item of plant. |
| * 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 [ ]  N[x]  |  |  |  |
| * Contact with moving parts during testing, inspection, operation, maintenance, cleaning or repair?
 | Y [x]  N[ ]  | Minor | Possible | Medium |
| * 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 | Possible | Medium |
| * The mobility of the plant?
 | Y [ ]  N[x]  |  |  |  |
| * Inappropriate parts and accessories being used?
 | Y [ ]  N[x]  |  |  |  |
| * Other
 | Y [ ]  N[x]  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| 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 would pose an electrical hazard.Non identification of ON/OFF switch could pose a hazard. | Ensure equipment is regularly serviced, tested and tagged and appropriate isolation procedures (i.e. lock out tags) are in place.Check that the cord is always well away from the cutter bit.Identify ON/OFF switches and include in safe work procedures.  |
| * 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]  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Hazards Inspected | Risk Assessment | Description of Risk | Control Measures |
|  | **Cons** | **Like** | **Risk****Level** |  |  |
| **ERGONOMICS**Can anyone be injured due to: |  |  |  |  | Selecting the incorrect cutter bit could cause manual handling injuries. | Ensure the correct cutter bit is installed to thickness of sheet metal. Include in safe work procedures. |
| * Poorly designed workstation?
 | Y [ ]  N[x]  |  |  |  |
| * Repetitive body movement?
 | Y [ ]  N[x]  |  |  |  |
| * Constrained body posture or the need for excessive effort?
 | Y [x]  N[ ]  | Minor | 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]  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| 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[ ]  | Moderate | Unlikely | Medium  | Operation of the plant equipment can result in high noise levels. | Ensure operator wears appropriate PPE (e.g. ear plugs, ear muffs) whilst operating the equipment. |
| **VIBRATION**Can anyone be injured or suffer ill-health from exposure to vibration? | Y [x]  N[ ]  | Moderate | Possible | Medium | The vibration can cause damage to the hands if they are used for long periods at a time. | Take regular breaks from continuous operation. Wear appropriate PPE (e.g. gloves) especially in cold weather.Maintain regularly to ensure smoother operation and less vibration. |
| **FRICTION**Can anyone be burnt due to contact with moving parts, materials or surfaces of the plant? | Y [ ]  N[x]  |  |  |  |  |  |
| **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]  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| 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 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. electric cord, spare materials, bags, etc) in the immediate vicinity of the plant equipment may result in a trip hazard. | Ensure appropriate cleaning and housekeeping standards are maintained at all times to minimise the risk of a slip, trip or fall.  |
| * 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]  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| 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 [x]  N[ ]  | Minor | Possible | Medium  | Nibbler bit may get hot with continuous use. | Do not use nibbler continuously.Back out frequently on deep cuts to clean and cool cutter bit. Allow cutter bit to cool prior to handling. |
| * 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 the local exhaust/ventilation system is switched on and in good working order. 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:       |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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

|  |  |
| --- | --- |
| 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. |

 |