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| **Site / Area:** |       | **Date of assessment:**  |  | **Risk Assessment #:** | **048RA** |
| **Completed by (name):** |       | **Signature:** |       |
| **In Consultation with** |       | **Signature:** |       |
| **Identify / describe activity, equipment, area or event you are assessing:**  | **Disc & Belt Sander** |
| **In conjunction with this risk assessment, training / education and development of a relevant SOP may be required.** |
| **Step 1:** **Identify the hazard/s:**What do you believe are the hazards?(Refer Risk Assessment Guideline (015G)) | **Step 2: Assess the risks:**What do you believe are the risks?(Refer *Risk Assessment Guideline (015G)*) | **Step 3: Reducing the risk:**What do you believe can be done to reduce the risk?(Refer *Risk Assessment Guideline (015G)*) |
| **What could cause harm?** | **What could go wrong?** | **Controls** |
| **Machinery and Equipment*** Operation of the Plant *(Mechanical Hazard)*
* Entanglement
* Impact and crushing - disc may disintegrate if poorly maintained, work pieces has foreign bodies (e.g. nails), not installed appropriately or incorrect disc being used.
* Work pieces may get ejected at high speed
* Friction
* Jammed work piece
 | * Laceration/friction burn to a worker/other fingers or hand
* eye injury from flying particles
 | * Guarding is installed and maintained on the plant
* 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/nets can be used to secure long hair.
* Ensure inappropriate jewellery and accessories (e.g. bracelets) are removed prior to operation.
* Ensure that the disc is inspected prior to use, appropriate for purpose and is fitted in accordance with manufacturer’s instructions.
* Ensure that no foreign objects are present in the material to be sanded (i.e. nails)
* Regular workplace inspections are conducted
* Worker/other are provided with personal protective equipment (PPE) (e.g. eye protection)
* Workers are trained in plant maintenance and all equipment is “locked-out” electrically when maintenance is undertaken
* The sanding table should be of rigid construction. Gap between the table and belt should be as small as practicable but sufficient to clear the debris.
* Abrasive belts are examined before use. Torn belts must be discarded. The guard should be reset before each use to limit the area of belt that is exposed between the top of the model and guard.
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| **Electricity*** Damaged or frayed electrical cords
* Electrical installation could be impacted and damaged
* Wiring could cause an electrical fire
* Unable to stop the plant in an emergency (Operational controls and e-stop)
 | * Electric shock
* Electrocution
* Fire
 | The plant undergoes regular electrical inspections (test & tag)The main power distribution board is RCD protectedWorkplace inspections are conducted to identify defective items Plant is fitted with standard on/off control panel and twist/lock-off style emergency stop switch and it is regularly checkedAppropriate isolation procedures are implemented (lock out / tag out)Fire fighting equipment readily accessible |
| **Airborne Contaminants*** Dust
 | * Asthma
* Irritation to the lungs
 | Local exhaust ventilation/ dust extraction system is installedPPE is available on requestEnsure appropriate cleaning and housekeeping practices are maintained e.g. regularly vacuum dusty floors.NOTE: DO NOT use air compressor to blow dust of clothes and machinery |
| **Noise*** Inadequate hearing protection
 | * Potential hearing loss/impairment
* Workers/other cannot communicate due to noise
 | PPE is available on request |
| **Gravity*** Slips, trips and falls
* Poor housekeeping practices allowing build up of waste materials or failure to clean spills immediately
 | * Sprains / strains
* Fractures
 | Ensure appropriate cleaning and housekeeping practices are maintained e.g. regularly vacuum dusty floors* Safe work zone marked out around the machine.
* Ensure objects are appropriately stored (e.g. spare material, electrical cords, bags) are not stored in the ‘work zone’
 |
| **Hazardous Manual Tasks*** Inadequate lighting
* Sustained or awkward postures
* High or sudden force
* Vibrating equipment
* Design of work area
* High speed movement
 | * Musculoskeletal problems
* Sprains / strains
 | Plant is set at a suitable height to minimise stoopingTrolleys are available for moving items if required |
| **OTHER** |  |  |

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| **Authorised by:** |  | **Signature:** |  | **Date:** |  |

**Review hazard/risk assessment if task or circumstances change and at intervals appropriate to the level of risk (minimum 5 years).**

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| **Step 4: Monitor & review:**(Refer to hazard sheet)**Please tick Yes or No** |
| **Were the controls effective?** | **Were there any unforeseen hazards/ incidents?** | **New controls** |
| **Yes** | **[ ]**  | **No** | **[ ]**  | **Yes** | **[ ]**  | **No** | **[ ]**  |
| **DETAILS** | **DETAILS** | **DETAILS** |
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| **Name:** |  | **Signature:** |  | **Date:** |  |