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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Site / Area: | | |  | | Date of Assessment | | |  | | Risk Assessment # | | **060RA** |
| Completed by (name) | | |  | | Signature | | |  | | | | |
| In Consultation with: | | |  | | Signature | | |  | | | | |
| Identify / describe activity, equipment, area or event you are assessing: | | | | | | | | **Metal Lathe** | | | | |
| Authorised by: | | |  | | Signature: | | |  | | Date: | |  |
| In conjunction with this risk assessment, training / education and development of a relevant SOP may be required. | | | | | | | | | | | | |
| **Step 1:** **Identify the hazard/s / Impact:**What do you believe are the hazards? What could happen? | | | | | **Step 2: Assess the potential risks:**  Template only MUST modify to site conditions  What do you believe are the risks?  How could this happen? | | | | | **Step 3: Reducing the risk:**  What do you believe can be done to reduce the risk?  Controls | | |
| **Machinery & Equipment**   * Operation of the Plant | | | | | * Worker/other becoming entangled in moving parts of the plant (chuck, gears and lead screw) * Laceration to a worker/others fingers or hand from swarf * Worker/other injured whilst changing gear-head speeds * Worker injured while conducting maintenance on the plant * Worker/other could receive an eye injury from flying particles and/or swarf | | | | | * Plant has an interlocked chuck guard fitted * The top gear cover is locked or electrically interlocked * Regular workplace inspections are conducted * Worker/others are provided with personal protective equipment (PPE) * Workers are trained in plant maintenance, and all equipment is “locked-out” electrically when maintenance is undertaken | | |
| **Machinery & Equipment**   * Entanglement (clothing in moving parts, such as drive gears, chucks, lead and feed screws and the workpiece) | | | | | * Sprains / strains * Amputation * bruising | | | | | * Exposed drive mechanisms are guarded at the front and back of the lathe. * Controls are within easy access of operator and away from the working zone. * No loose clothing to be worn * Hair tied back * No gloves | | |
| **Machinery & Equipment**   * Being hit by loose objects (e.g. chuck keys, tools or swarf) | | | | | * Bruising * Lacerations * Irritation to eye | | | | | * Ensure headstock is clear and free from clutter * Items are not to be placed on headstock. * Ensure close-fitting clothing with no catch points are worn by operators. * All jewellery, including watches, rings, bracelets, chains are removed before operating the lathe. | | |
| **Electrical**   * poorly maintained/damaged plant * 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 | | | | | * The plant undergoes regular electrical inspections (test & tag) * The main power distribution board is RCD protected and RCD’s checked regularly * Workplace inspections are conducted to identify defective items * Plant is fitted with standard on/off control panel and twist/lock-off style emergency stop switch | | |
| **Machinery & Equipment**   * Heat | | | | | * Worker/other receives burns from hot metal and/or swarf | | | | | * Worker/others are provided with personal protective equipment (PPE) * Pliers or vice grips can be used to remove any hot work pieces from chuck if necessary | | |
| **Noise**   * Prolonged exposure to noise * Inadequate hearing protection | | | | | * Potential hearing loss/impairment * Workers/others cannot communicate due to noise | | | | | * PPE is available on request * Workers/others are trained on the dangers of workplace noise | | |
| **Hazardous Manual Tasks**   * Incorrect storage of equipment * Inadequate lighting * Sustained or awkward postures * Limited workspace available | | | | | * Workers/others could receive an injury due to poor work postures | | | | | * Plant is set at a suitable working height * Trolleys are available for moving items if required * All workers and others are trained in safe manual handling techniques * Machine is securely fixed into position | | |
| **Airborne contaminants**   * dust and vapours | | | | | * Respiratory illness * Eye irritation | | | | | * Local exhaust ventilation installed * PPE is provided and worn as required * Regular housekeeping (sweeping / vacuuming) | | |
| **Gravity**   * Slips, trips and falls | | | | | * Sprains / strains | | | | | * Maintain a clear workspace in and around the lathe * Non-slip floor surfaces * Regular housekeeping (sweeping / vacuuming floors). | | |
| **Other:** | | | | |  | | | | |  | | |
| **Review hazard / risk assessment if task or circumstances change & at intervals appropriate to the level of risk (minimum 5 years)** | | | | | | | | | | | | |
| **Step 4: Monitor & Review:** | | | | | | | | | | | | |
| Were the controls effective? | | | | | Were there any unforeseen hazards / incidents? | | | | | New controls | | |
| Yes |  | | No |  | Yes |  | | No |  |
|  | | | | |  | | | | |  | | |
| Name: | |  | | | Signature | |  | | | Date |  | |