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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 conditionsWhat 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.
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| **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 |  |