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| **Site / Area:** |       | **Date of assessment:**  |  | **Risk Assessment #:** | **046RA** |
| **Completed by (name):** |       | **Signature:** |       |
| **In Consultation with** |       | **Signature:** |       |
| **Identify / describe activity, equipment, area or event you are assessing:**  | **GRINDER - CORDLESS** |
| **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** |
| **Entanglement** | * Long hair, loose clothing, rags and jewellery could become entangled in the moving parts of the equipment
 | * Hair ties / hair nets / hats can be used to secure long hair.
* Ensure jewellery and accessories are not worn or secured when operating equipment.
* Ensure clean working environment, no loose rags.
 |
| **Impact and cutting injuries** | * The exposed moving disc presents a risk to an operator’s hands and body parts
* Potential for disc to fragment on use
* Inappropriate accessories used on the angle grinder may result in the disintegration of the disc or work piece being ejected
* Material being worked on becoming a projectile
 | * Ensure operator’s hands and body parts are kept clear of moving grinding disc during operation and maintenance
* Ensure worker / others check the disc prior to use for flaws or cracks
* Ensure the appropriate discs are used for specific tasks
* Ensure only attachments designed for the size of the angle grinder are used
* Ensure the attachment centre hole matches the size of the angle grinder spindle hole
* Ensure the maximum speed marked on the attachment is higher than the maximum speed of the angle grinder
* Ensure guards are fitted securely in the correct position before use
* Worker / others are competent in the use of cordless angle grinder
* Worker / others don’t apply excessive pressure to the work piece during operation
* Worker / others to ensure angle grinder has reached its speed before use
* Worker / others to position their body so it is not directly behind the angle grinder
* Worker / others to ensure work piece is secure
* Ensure the thickness and diameter of attachments are within the angle grinder ratings
* Ensure flanges and nuts are free from wear for damage before use
* Ensure the auxiliary handle is attached to stop the angle grinder making contact if grinder kicks back
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| **Electricity** | * Workers / others can sustain an electric shock or possible electrocution
 | * Ensure battery charger does not have damaged electrical cords prior to use

Ensure battery charger and battery is safe to use, no cracks or housing is not broken or damaged* Use of a RCD when plugged into a GPO for charging

Charger to be used only in a dry environmentCharger to be checked prior to useCharger to be tested and tagged and current tag fittedBattery to be charged in well ventilated environment |
| **Noise** | * Operation of the grinder can result in high noise levels
 | * Ensure appropriate PPE (Hearing protection) is worn whilst operating the equipment
* Ensure personnel in vicinity are aware of usage and not exposed to operating noise
* Minimise workers / others in vicinity of operation of grinder
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| **Vibration** | * The worker / others could be exposed to hand and arm vibration as a result of vibration generated when operating
 | * Take regular breaks from continuous operation
* Wear appropriate PPE (Anti vibration gloves) especially in cold weather

Conduct periodic maintenance to ensure smoother operation and less vibration* Use of auxiliary handle to minimise fatigue and vibration
* Worker / others to take regular breaks
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| **Friction** | * Friction injuries may occur from contact with grinder disc
 | * Ensure workers / others hands and body parts are kept clear of moving grinding disc
* Ensure grinding wheel has stopped and allowed to cool before replacing worn disc with new
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| **Slips, Trips, Falls** | * Poor housekeeping practices allowing the build-up of waste materials could result in a trip hazard
* Inappropriate placement of objects (electric cord, spare materials, bags, etc.) in the immediate vicinity of the work area may result in a trip hazard
 | * Ensure appropriate cleaning and housekeeping practices are maintained to minimise the risk of a slip, trip or fall
* Ensure work area is controlled, to prevent unnecessary personnel entering work area (Bunting)
* Ensure workers / others that may be working in the vicinity are aware of work being undertaken
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| **Fire and Explosion** | * Sparks created during the grinding process may become an ignition source if flammable material is in the immediate vicinity (flammable liquids, wood dust, rags)
 | * Ensure the angle grinder is not used near flammable materials and good housekeeping practices are maintained
* Ensure access to firefighting equipment is readily available
* Emergency procedures are known
 |
| **Temperature, Moisture** | * Work piece and grinding wheel may get hot with continuous use.
 | * Do not continuously use grinding wheel

Allow grinding wheel and work piece to cool prior to handling |
| **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:** |  |