A23 TRAILER REPAIRS

# RISK ASSESSMENT

## Grinding (Hand and Bench Grinders)

| | | | |
|---|---|---|---|
| **Location:** | All Workshop & MSU Technicians | **Subject:** | Grinding (Hand and Bench Grinders). |
| **Document Ref:** | A23 RA1 037 Version 6 | | |

## Job Analysis - typical tasks:

Workshop and MSU technicians carry out a wide range of maintenance and repair tasks on LGV trailers. Grinding using both bench and hand grinders is a routine task used in preparation and clean up after welding and part fabrication.

## Restrictions / Special Notes:

- A23 Apprentices are not permitted to use grinding equipment until deemed competent by a Regional Fleet Engineer (must be at least year two).
- Grinding is designated as hot work - MSU technicians MUST seek approval from the customer before hot work is completed on a customer site.

| Who may be harmed & how? | Injuries Anticipated | Hazards Anticipated |
|---|---|---|
| • Workshop / MSU Technicians.<br>• Customers employees.<br>• Others. | • Sharp objects, fillings, flying sparks.<br>• Smoke, dust, respiratory issues.<br>• Noise greater than 85db.<br>• Vibration.<br>• Moving parts (entanglement/ entrapment).<br>• Fire.<br>• Collision with moving vehicles.<br>• Manual Handling injuries. | • Sharp edges on material being grinded.<br>• Metal filings and flying sparks.<br>• Breaking or shattering abrasive wheel discs.<br>• Hand / arm vibration exposure.<br>• Entanglement of loose clothing or long hair.<br>• Entrapment of fingers in moving parts.<br>• Fire hazard from flying sparks.<br>• Sudden movement of vehicle being worked on. |

## Base Line Risk Assessment

| Severity of risk / injury | | Likelihood of risk / injury | |
|---|---|---|---|
| No Injury (1) | Minor Injuries (2) | Extremely unlikely (1) | Unlikely (2) |
| Major Injuries (3) | Fatal (4) | Likely (3) | Very Likely (4) |

**A23 Trailer Repairs Risk Level Calculation Formula: (Risk Level = severity x likelihood)**

| | | |
|---|---|---|
| **HIGH 9 - 12**<br>HALT the activity immediately. Review & reduce the risks identified. | **MEDIUM 6 to 8**<br>Inform management & seek further advice before proceeding. | **LOW 1 to 5**<br>Review the operation / activity & take any steps necessary to reduce & control the risks. |

**Control measures should be in the order of ELIMINATE; ISOLATE; SUBSTITUTE; REDUCE; CONTROL**

## Existing control measures:

- **Vehicle Movement & Lockout:** Fully lock out the trailer, tanker, or vehicle prior to work. Apply park brake, use wheel chocks, display VOR board, and remove keys. Use the MSU vehicle to lockout movement if required.
- **Collision with traffic:** Only work on equipment in a safe area. Customer drivers/visitors must wait in unhitched units or reception and be escorted on site. No other persons are permitted in the work area during grinding.
- **Bench Grinder Setup:** Must be secured to workbench with unobscured access. Adjust rest plate to 3mm from grinding surface. Upper spark guard must be fitted. Wheel must not be worn below safe limits and must be dressed correctly.
- **Hand Grinder Setup:** Correct guarding must always be fitted. Second handle must be fitted on larger grinders (and small ones when possible). Ensure correct disc material, speed rating compatibility, and safe wear limits. Must have a constant pressure on/off switch that cannot be overridden.
- **Equipment Faults:** Visually inspect tool, disc, and power cable before and after use. Lockout, tag, and report any damaged equipment. Internal electrical repairs by A23 employees are prohibited.
- **Entanglement/Entrapment:** Keep loose clothing away, tie back long hair, ensure bench grinder base plates are 3mm from the wheel. Do not wear loose clothes during operation.

## Hazard Specific Controls:

**Exposure to noise:** Hearing PPE must be worn, as noise will exceed 85db action levels. Warn others in the local area before grinding.

**Hand & Eye Injuries:** Wear safety glasses and a full-face mask or safety goggles. Wear tight-fitting, cut-resistant work gloves for protection with minimal entanglement risk.

**Exposure to dust/fumes:** Wear suitable half-face masks when grinding (disposable or filtered).

**Fire Hazard:** The danger area must be clear of all flammable material. Hot work should not be carried out on loaded trailers. A fire extinguisher must be present. Change any oil-soiled clothing before grinding. Use welding screens to protect 3rd parties from sparks/flashes.

**Manual Handling / Ergonomic issues:** Dependent on task. Apply safe manual handling techniques. Ask for help for heavy parts.

**Exposure to chemicals (COSHH):** Be aware of potential chemical spillage from loads. Keep MSDS sheets available. Wear nitrile gloves and practice good industrial hygiene.

**Vibration:** Report any excessive tooling vibration to management.

## Details of Personal Protective Equipment (PPE) requirements:

- A23 issue overalls.
- Hi-visibility jacket or waistcoat (at night).
- Safety shoes or boots.
- Bump cap whilst working under the trailer.
- Safety glasses & full face shield.
- Tight-fitting cut resistant gloves.
- Ear protectors.
- Respiratory PPE (Half-face mask).

## What further action is necessary?

**Action:** Comply with other issued risk assessments. Stop work and report any noncompliance issues. Report incidents/ near misses immediately.

| Post Preventative Risk Assessment | | | |
|---|---|---|---|
| **Severity of risk / injury** | | **Likelihood of risk / injury** | |
| No Injury (1) | Minor Injuries (2) | Extremely unlikely (1) | Unlikely (2) |
| Major Injuries (3) | Fatal (4) | Likely (3) | Very Likely (4) |
| **A23 Trailer Repairs Risk Level Calculation Formula: (Risk Level = severity x likelihood)** | | | |
| **HIGH 9 - 12**<br>HALT the activity immediately. | **MEDIUM 6 to 8**<br>Inform management & seek advice. | **LOW 1 to 5**<br>Review operation & control risks. | |

| **All authorized personnel are required to sign that they have read and understood the requirements of this risk assessment.** | | |
|---|---|---|
| **Name** | **Signature** | **Date** |
| | | |
| | | |
| | | |