SAFE OPERATING PROCEDURE

BENCH GRINDER

TRAINING LEVEL ONE Health and safety

PERSONAL PROTECTIVE EQUIPMENT

The following PPE is to be worn when using this machine/equipment



POTENTIAL RISKS/HAZARDS AND HARM

 Rest plate not adjusted to the correct angle or not used. 	 Potential pinch point leading to injury and damage to the equipment and material being used.
2. Gap between rest plate and grinding wheel is greater than 4mm wide.	 Injury or laceration to fingers being trapped in a pinch point
3. The external wheel guards are not in place. Kickbacks or jambs	 Hand, fingers or body injury.
4. The grinding wheel chips or disintegrating.	 Inadequate light for the grinding or buffing.
5. Long hair or loose clothing caught up in the grinding wheel.	 Scalping or body injury.
6. Eye protection not worn.	 Potential eye face or body injury. (See safety instruction re wire brush

LOCK OUT AND ISOLATION PROCEDURES When cleaning, repairing, maintaining, or changing parts of any machinery always follow the company's lockout and isolation procedure, <u>prior to</u> <u>undertaking the cleaning etc</u>. There are no exceptions to this company rule.



TRAINING LEVEL TWO

PRE OPERATIONAL CHECKS

Check the grinding wheel on a regular basis for:-

- The safety glasses and full face shield are available
- The On/Off switch is working properly.
- The electrical certification tag is current
- The safety guards are in place and securely fastened.
- General for wear and tear.
- Check the grinding wheel for cracks and chips.
- Check the rotation of the spindle for true even revolving of the wheel by spinning the wheel by hand.
- The adjustable safety glass is in place and can be seen through.
- The correct safety signage is in place
- The gap between the rest plate and the grinding wheel is no more than 4mm.
- Guards are in place and secured.

SAFE OPERATING PROCEDURE

- 1 This machine is only to be used by trained and authorised employees.
- 2 Always check the grinding wheel for damage and the correct adjustment of the grinding platform prior to switching on the bench grinder. If the grinding wheel is damaged complete a Yellow Card and notify the manager
- **3** When using a wire brush wheel always wear the safety goggles and the safety visor.
 - Make sure that no other person is in the immediate work area because if a wire snaps and fly's off it may harm you or others.
- 4 When starting the grinder stand to one side and then allow it to reach full speed before you start grinding. Do not use a wheel that vibrates. Immediately stop the work and check it.
- **5** Always grind on the face of the wheel and at the correct angle so you can see the grinding face.

Move the object being ground back and forth across the grinding wheel or you will make a grove in the wheel.

- 6 If the work is small, use vice grip or custom tool /material holder. Do not touch the work until it is cooled
- 7 If grinding steel, use a water bath to prevent the steel from over heating and weakening the steel or tool.
- 8 When finished keep the clean work area clean for others to use.
- 9 If maintenance is required, the grinder is to be electrically isolated/locked out.

TRAINING LEVEL THREE

THE RING TEST FOR THE GRINDING WHEEL

- 1. Isolate the power and remove the grinding wheel and suspend it on a non-metallic dowel.
- 2. Gently tap the grinding wheel with the handle of a screw driver,
- 3. If it produces a ringing tone there are **no** cracks.
- 4. If it produces a dead or dull sound there are cracks
- 5. Discard and replace the grinding wheel if it is cracked, chipped or badly worn. Make sure you replace the right grinding wheel for the speed of the machine.
- 6. Refit all the guards correctly and ensure they are secure.
- 7. Before re-using the bench grinder run the wheel for 10-20 seconds at full speed to check that the wheel is correctly fitted, balanced, and free from wobble.

NOTE: The wheel dressing to true or balancing wheels should only be done by an authorised, trained and experienced operator that has the correct dressing tools.