Saws Grinders – Portable Abrasive Saws and Grinders Meeting Kit

WHAT'S AT STAKE

Many workers have been near an operating portable, abrasive saw or grinder without ever realizing their danger. Personal safety can be endangered by several functions of this type of machinery – by the power source, blade, wheel or from a disk failure or hazard from flying or airborne particles.

WHAT'S THE DANGER

DANGERS/HAZARDS OF SAWS/GRINDERS PORTABLE OPERATIONS

Accident statistics indicate that nearly half of all accidents regarding are abrasive wheels are due to an unsafe system of work or operator error.

Using the wrong wheel for the task, or using the tool in the wrong way, can harm in a variety of ways, including:

- Cuts to the skin
- Amputation of fingers
- Eye injuries
- Head injuries
- Foot injuries
- Other impact injuries

There are several types of accidents caused by Saw grinders:

1. **Contact with the wheel**. Saw grinders can cut through stone, concrete, metal and other hard materials, so they have no trouble cutting through human flesh and bones.
2. **Wheel breaks.** The risk of breakage is inherent in every abrasive wheel. This risk must be kept low by checking

discs, correctly mounting, and safely using Saw grinders.

3. **Contact with projectiles**. Projectiles are flying particles and materials. They can happen if the wheel bursts, but also by the material being cut or ground.
4. **Kickback**. Kickback can cause severe and even fatal accidents. Kickback happens when the Saw grinder grabs or jams on the material when cutting. Kickback is more likely if you are using the wrong wheel or running at the wrong speed.
5. **Entanglement.** Wearing the wrong clothing can cause a Saw grinder accident. There is a risk of entanglement. Do not wear loose clothing or jewellery, and tie back long hair.
6. **Fire.** When using an Saw grinder, you are likely to produce a large number of sparks. You might not be able to stop this, so you should make sure you are in a safe environment to use a Saw grinder.
7. **Electric shock.** Many Saw grinders are electric, so you should consider accidents caused by portable electrical equipment too.

HOW TO PROTECT YOURSELF

BEST SAWS/GRINDERS SAFETY USE PRECAUTIONS

- Guards must be provided and adjusted properly as per the manufacturers manual to protect you.
- Before use, check the manufacturer’s stated running speeds, or markings on the grinder, and grinder wheel for the maximum speed that it can be used.
- Follow manufacturer’s manual for the safe use of grinder wheel guards.
- Clean and service grinders according to manufacturers’ recommendations. Record maintenance.
- Ensure that a machine will not operate when unattended by checking the dead-man switch.
- Wear safety glasses or goggles, or a face shield (with safety glasses or goggles) to protect against flying particles. Gloves, aprons, metatarsal safety boots, hearing protection, and respiratory protection may be required,

depending on the work.
- Ensure the floor around the work area is clean.
- Use both hands when holding the grinder.
- Keep the power cord away from the grinding wheel and the material being ground.
- When required, have a hot work permit before use.
- Make sure the work area is clear of flammable materials. Avoid combustible dust accumulation.

What Not To Do When Using Portable Grinders

- Do not use wheels that are cracked or those that excessively vibrate.
- Do not operate grinder on wet floors.
- Do not use grinders near flammable materials.
- Do not clamp portable grinders in a vise for grinding hand-held work.
- Do not use any liquid coolants with portable grinders.
- Do not force wheels onto a grinder that is the wrong size or change mounting hole sizes.
- Do not tighten the mounting nut excessively.
- Do not put the grinder on the floor or working surface until the wheel has stopped turning.
- Do not use a wheel with a maximum RPM that is lower than the RPM rating of the grinder.
- Do not keep any materials close to the grinding wheel when it is not in use.
- Do not wear loose clothing or dangling jewellery as they may get caught in the moving parts of the grinder. If you have long hair, keep it tied back.

FINAL WORD

Workers should be instructed in the use of any personal protective equipment, including face or eye shields and respirators, necessary to protect them from physical or airborne hazards when working with or around portable abrasive saws and grinders.