

MAFES Dawg Tracks

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MISSISSIPPI STATE UNIVERSITY™
MS AGRICULTURAL AND
FORESTRY EXPERIMENT STATION

Grinders

Almost all of the maintenance shops that I have been around have a bench grinder or a free-standing pedestal grinder. They are powerful and have many varied uses, but also can be very dangerous. They are like many different tools. With extended use, the operator can become careless. Through repetitious use the use of the grinder may become “automatic.” This is where the problem can arise. Serious injury and possibly death can result from improper handling, improper installation of grinding wheels, or abrasive wheels.

Cracked or defective grinding wheels can explode when in use. Proper guarding is one of the most important safety requirements.

Following are some good tips for our working environment as well bench grinder use:

Personal Protective Equipment (PPE) -

- ✓ Dressing right for the job is important. How often do we pay no attention to dressing safely for work?
- ✓ Safety glasses should be worn. Remember to keep the eye shields properly adjusted on the grinder.
- ✓ Hearing protection should be worn at all times due to the noise levels from the machine and the grinding.
- ✓ Sturdy foot wear should be worn at all times in the various work areas.
- ✓ Long hair should be tied up and back to avoid getting caught.
- ✓ Your wearing apparel should be fitted tightly to avoid entanglement or caught.
- ✓ Refrain from wearing rings and jewelry.

Potential Grinding Hazards-

- Sparks
- Hot metals
- Noise, sharp edges, or burrs
- Hair/clothing caught in moving parts
- Wheel run-off after turning the switch off.

**FLESH & BONE ARE NO MATCH
FOR A GRINDING STONE**

PROTECT YOUR HANDS--USE YOUR HEAD!!!

Safety Tips for Pre-operation-

- ✓ Be sure to get familiar with all the parts and controls on the grinder before you use it.
- ✓ Be sure that all the guards, tool rests and shields are in place, functional, and secure.
- ✓ Check to make sure that the tool rests are properly adjusted from the wheels. The standard is 1/8 “from the edge of the tool rest to the wheel’s edge. (+1/8, - 0)
- ✓ Check to see that the grinding wheels are running true (not out of round) and aren’t glazed or loaded.
- ✓ Be sure to check to see that there are no cracks in the wheels. Report it to your supervisor or change the wheel, whichever is convenient.

Tips for Safe Operation-

- ✓ When starting the grinder up, stand to the side until it gains full speed.
- ✓ Allow the wheels to get at full speed before you start to grind.
- ✓ Only one person should work on the grinder at a time.
- ✓ When using the grinder, get accustomed to moving your work pieces, across the tool rest in a slow and smooth manner.
- ✓ Turn the machine off when your work tasks is completed. Refrain from walking off and leaving the machine running.
- ✓ Leave the area clean and tidy, better than you found it is a good trait to practice.

Negative Tips or “Don’ts”-

- ✓ Do not use faulty equipment. Report repair to your supervisor.
- ✓ Do not hold your workpiece with gloves, apron, or a cloth.
- ✓ Do not grind on the side, unless it is designed to do so.
- ✓ Do not hold small objects in your hand.
- ✓ Refrain from leaving the machine unattended.
- ✓ Do not force your workpiece against the wheel.
- ✓ Refrain from bending down by the machine with it running.

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Excerpts: www.wniss.com/resources/bench_grinder_safety 4/20/2017