MISSISSIPPI STATE UNIVERSITY EXTENSION

MSU DAWG TRACKS

Angle grinders are used in a variety of job task such as maintenance, construction, and even emergency response. Whether using an abrasive or cut-off wheel, workers can be exposed to serious hazards such as:

- Bodily injury from being struck by the object being cut or ground.
- Bodily injury from a damaged or loaded wheel.
- A body part caught or pulled in by moving parts of the grinder.
- Eye injuries from flying debris (for example, metal particles or a wheel that disintegrates).
- Hearing damage from excessive noise or an extended time period.
- Respiratory issues from inhaling hazardous dust.

To avoid potential accidents and injury:

- Always wear the appropriate PPE.
  - Safety glasses & face shield
  - Hearing & respiratory protection if needed.
- Avoid loose clothing, long hair or gloves.
- Ensure guards are securely in place & properly positioned to deflect pieces of an accidentally broken wheel and grinding debris away from the operator.
- Make sure wheels and tools meet the design and construction requirements of American National Standards Institute (ANSI). Cheaply made tools and wheels can be deadly.
- Wheels must fit freely on the spindle and not be forced on. The spindle nut must only be tightened enough to hold the wheel in place. Proper mounting flanges and nuts must be used for each different type of wheel & be compatible with that tool.
- Be aware of your surroundings (including people & fire hazards); direct cutting sparks away to protect people & property.

Make sure angle grinder wheels are safe to use:

- Use the proper size wheel on the grinder; too small or too large can be dangerous.
- Visually inspect the wheels for cracks or damage before installing & before each use.
- Make sure the spindle speed of the grinder is not greater than the maximum operating speed of the wheel used. The maximum operating speed is marked of the wheels label.
- Never use a damaged or cracked wheel.
- Be aware of expiration dates on wheels (printed on metal center). UV light, changes in temperature, humidity, and other storing conditions cause the bonding agents that keep the wheel together to break down.
- Ensure the wheel you choose is meant for the material you are using it on.
- Use wheels only for the tasks they are designed to perform. Do not use cut-off wheels for grinding or deburring.
- Do not twist, turn or bend a cut-off wheel while using it.
- Do not jam wheels into a workpiece.
- Do not store wheels in high humidity areas; keep them away from direct sunlight, water & other fluids.

For more info contact:
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Sources:

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