

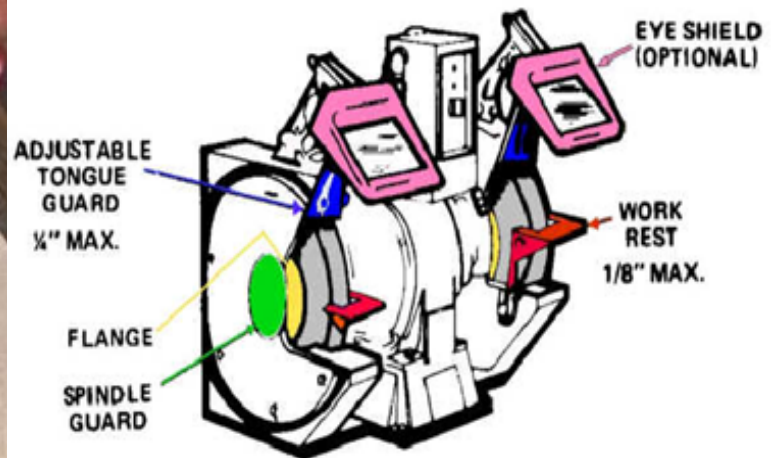
# CIRSA HAZARD ALERT

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Your Partner in Risk Management

## Bench and Pedestal Grinders

Frequent recommendations on annual property surveys focus on bench and pedestal grinders. The improper use and maintenance of this common piece of machinery in public works, parks, and vehicle maintenance shops can contribute to serious injuries and even death. Most of these incidents are preventable and are caused due to carelessness, lack of maintenance, and not having the proper knowledge of how to use the machine.



The picture above shows a person who lost the end of their little finger on a grinder.

### **These rules should be followed when grinders are made available for employees to use:**

- Employees should be trained in how to inspect prior to every use, maintain, and properly use a bench/pedestal grinder.
- Follow the manufacturer's recommendations for the use of the grinder, types of grinding wheels to be used, and mounting of the grinding wheel.
- Employees should be provided with the Personal Protective Equipment (PPE) needed to use a grinder safely. This includes safety glasses to protect your eyes, a face shield that meets ANSI Z87.1+(high impact) standards to protect your face and neck, and depending on the exposure, a particulate respirator.
- PPE should be stored in an enclosed cabinet near the grinder to keep it clean and ready for use.

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## ***Bench and Pedestal Grinders (cont.)***

- A warning sign should be posted near the grinder reminding employees to use the needed PPE.
- The bench grinder should be firmly attached to the bench so that it won't move when in use.
- The grinder should be firmly attached to the pedestal, which has feet/legs that are spaced and are long enough to prevent toppling when used or are attached to the floor.
- An exclusion zone should be permanently marked off on the floor around a pedestal grinder, inside which other tools and materials should not be stored.
- The Revolutions Per Minute (RPM) rating for the grinder should be highlighted on the specification tag or displayed on a sign posted near the grinder.
- Only wheels rated equal to or higher than RPM rating of the grinder should be mounted on the grinder.
- The grinder should be equipped with a tool rest and tongue guard. The tool rest should be adjusted and maintained to within 1/8 inch of the face of the wheel. The tongue guard should be adjusted and maintained to within 1/4 inch of the face of the wheel.
- Grease and dust should not be allowed to accumulate around the grinder. Rags and flammable liquid containers should not be stored near the grinder where flying sparks might land. Practice good housekeeping by cleaning up around the grinder before and after it is used.
- Before being mounted on the grinder, the grinding wheel should be ring tested. Grinding wheels can be gently tapped on the side with the handle of a screwdriver or a wooden mallet (for large wheels). If the wheel sounds dead/cracked, the wheel should be discarded.
- Secure any loose clothing, dangling jewelry, or hair that might be pulled into the spinning wheel.
- When turning the grinder on, stand off to the side until the wheel has come up to speed for a full minute. That way, if the wheel explodes due to a crack or improper installation, flying fragments are less likely to strike you.
- Grind only on the face of the wheel, never on the side.
- Never leave a grinder unattended that is turned on. Always wait for the wheel to stop moving before leaving the grinder.
- If possible, use both hands to secure whatever it is you are grinding.
- Never force grind so that the motor slows or work gets hot. Never bump or pound material into the wheel. Use steady, even pressure.
- Never allow others to stand behind or in front of you while using the grinder.