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GRINDERS

Grinders use powered rotating attachments to work metal and other materials. Bench grinders are mounted to a bench or tabletop while pedestal grinders are mounted to the floor on a pedestal. With an abrasive, wire brush, or buffing wheel attachment, grinders sharpen tools and shape, clean, or polish metal pieces. Grinders can cause severe injuries to hands, fingers, and eyes and face if they are not used correctly.

Don't wear gloves that could get pulled into rotating grinder parts along with your fingers and hand. Remove jewelry from around your neck, fingers, and wrists. Wear close-fitting clothing that will not get entangled in the moving parts. Tie back or secure long hair under a cap so your hair doesn't get entangled and pull your face into the grinder. Wear safety goggles and/or a face shield to prevent flying debris from cutting your face or getting lodged in your eye.

Check your grinder for safety before each use. It should be securely and permanently mounted to the bench or floor for stability. Don't "C" clamp portable grinders to a bench. They need to be securely fastened to prevent vibration. The electric supply to the grinder should be properly grounded to prevent shocks. The grinder should have an individual on/off switch for the safest controls. If the grinder is not in good working order, do not use it.

Follow the manufacturer's directions on proper wheel installation. Inspect the wheel and "ring" or "tap" test it to ensure that it is sound before you install it. Tighten nuts securely so the wheels don't fall off while you are working. Allow a newly installed wheel to run before you use it to grind to ensure that it is sound. Use the correct wheel attachments for your grinder. Wheels should have an RPM rating that matches the RPM rating of the grinder motor. Use the correct type of wheel for the material you are grinding. Store wheels so that they are not subject to the environment or damage.

Guarding is extremely important for safe grinder operation. Side guards should cover the spindle, nut, flange and wheel. Use a work rest that is adjusted to within 1/8-inch of the wheel. Adjust the tongue guard to within 1/4 inch of the topside of the wheel. When the grinder is off and completely stopped, adjust the work rest and tongue guard to maintain these distances. When you can no longer adjust the work rest or tongue guard to maintain proper clearance, replace the wheel.

Don't start the grinder with your materials against the wheel; wait for the grinder to speed up and then apply the material. Place your material or item on the front face of the wheel, not the side. Keep your hands and fingers at least two inches away from the grinding surface. To avoid the risk of electric shock, dip tools and material into water to cool, don't apply water to the wheel.

Periodically sweep around grinders to maintain good housekeeping. Ground metal pieces can be very slippery, so consider a slip-resistant floor mat or flooring surface coating around the grinding bench. For grinders that produce large amounts of dust, consider a dust collector, exhaust hood, and/or respiratory protection. For fire

safety, don't grind aluminum; use a belt sander. Avoid grinding magnesium because the dust can be extremely flammable.

Content Source: Occupational Safety and Health Administration (OSHA) (Users of Safety Talk are advised to determine the suitability of the information as it applies to local situations and work practices and its conformance with applicable laws and regulations.)

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