

Stationary Grinders

There are three common hazards associated with using grinders:

1. If a grinding wheel explodes at high speeds, shattered pieces of it could fly into your face.
2. If your hands touch the wheel, you will lose skin and flesh.
3. If the work piece gets very hot, your fingers could be burned.

Protect yourself from these dangers:

1. Always wear eye protection.
 - a. Protect your eyes even if your grinder is equipped with a shatterproof eye shield.
2. Keep shields in place.
 - a. The eye shield and the wheel shield are both needed to protect you from wheel fragments if the wheel breaks or shatters at high speed.
3. Check for a defective wheel before installing a new one.
 - a. Support the grinding wheel on your finger in the arbor hole and tap it gently with a light metal object.
 - b. A clear ring indicates a sound wheel. "No ring" indicates a defective wheel and it should not be used.
4. Use compression washers and flanges on each side of the wheel.
 - a. Make sure the size of the arbor hole in the wheel matches the diameter of the grinder shaft.
 - b. If not, obtain and install bushings of proper size and length.
5. Make sure that the speed of your grinder does not exceed the recommended speed for the wheel.
6. Set the tool rests slightly above center and 1/8 inch from the face of the grinding wheel.
 - a. This position will help prevent thin work pieces and your fingers from getting wedged between the tool rest and the grinding wheel.
7. When starting the grinder, stand to one side of the wheel, turn on the switch, and let it run for a minute before doing any grinding.
 - a. Then grind with light pressure gradually until the wheel warms up.
 - b. Cold wheels may shatter.
8. Grind only on the face of the wheel.
 - a. Side pressure may break the wheel if it's not specifically designed for side-pressure grinding.
9. Protect your fingers and hands.
 - a. Never adjust the tool rests when the wheel is turning.
10. Wear eye protection when grinding pieces to be ground with pliers or a locking wrench.
 - a. Position work pieces on the tool rest to prevent them from getting wedged between the tool rest and wheel.
11. Grind with moderate pressure.
 - a. Forcing the work against the wheel heats the work piece quickly, wears the grinding wheel out of round, and increases the chance that your fingers may slip onto the wheel.
 - b. Grind with only moderate pressure, and dip the work piece in water frequently to keep it cool.
 - c. To eliminate the need for applying the work piece against the wheel with more than moderate pressure, keep the wheel sharp and true by dressing it when needed.