How to Use a Bench or Floor Grinder Safely

Make sure the manufacturer’s recommended speed, as posted on the wheel, is compatible with your grinder.

Always protect your eyes—wear only an eye or face shield bearing the logo Z-87.

Maintain the tongue guard within 1/4 inch of grinding wheel.

Be sure the power transmission cover is securely in place.

Be sure the outer wheel guard is in place.

Maintain the tool rest within 1/8 inch of grinding wheel.

Mount the grinder securely.

*As the wheel wears down, readjust the tool rest and tongue guard. When you can no longer adjust them, replace the wheel.

Important: When installing a new wheel, closely follow the manufacturer’s instructions. An improperly installed wheel can break (right) and cause injury.

Adapted from:
Tech Guide No. 2 Published by the Safety, Health, Environmental Technology Division of Georgia Tech Research Institute 1986
Checklist: Abrasive Wheel Equipment Grinders

Violations of abrasive wheel equipment grinder standards rank among the top 20 most common OSHA violations. More importantly, hand and eye injuries, hearing damage and even respiratory problems can result from unsafe usage. This checklist highlights some of the safety precautions that should be taken when working with these useful but dangerous tools.

- Is the work rest used and kept adjusted to within 1/8 inch of the wheel?
- Is the adjustable tongue on the topside of the grinder used and kept adjusted to within 1/4 inch of the wheel?
- Do side guards cover the spindle, nut, flange, and 75 percent of the wheel diameter?
- Are bench and pedestal grinders permanently mounted?
- Are ANSI-approved goggles or face shields always worn when grinding?
- Is the maximum RPM rating of each abrasive wheel compatible with the RPM rating of the grinder motor?
- Are fixed or permanently mounted grinders connected to their electrical supply system with metallic conduit or by another permanent wiring method?
- Does each grinder have an individual on/off switch?
- Is each electrically operated grinder effectively grounded?
- Before mounting new abrasive wheels, are they visually inspected and ring tested?
- Are dust collectors and powered exhausts provided on grinders used in operations that produce large amounts of dust?
- To prevent coolant from splashing workers, are splash guards mounted on grinders that use coolant?
- Is cleanliness maintained around grinders?

Checklist courtesy of OR-OSHA, Oregon’s Occupational Safety & Health Division

If you have questions or would like more information, please email us at: losscontrol@vlct.org or call 800-649-7915.