

SAFETY COMPENDIUM – GRINDERS



- All grinders are required to have four guards: standard hood, safety glass protection plate, tongue guard, and tool rest.
- The gap between the tool rest and the wheel can not be more than 1/8 inch.
- Lighting and noise surveys are required for grinder operations.
- Appropriate PPE must be used when grinding.
- A Job Safety Analysis must be completed for using the grinder.
- The RPM rating for abrasive wheels and the grinder motor must be compatible.¹

Stationary Grinders²

Equip all bench grinders, emery wheels, and other similar devices with safety glass protection plates. Instruct your employees to operate these devices only when the plates are positioned. Guard abrasive grinders with a standard hood that protects both sides of the periphery. Make sure grinding activities are conducted on the face of the wheel, not on the sides. Provide a tool rest, making sure that the gap between the abrasive wheel and the tool rest never exceeds 1/8 inch. Replace a wheel or stone that has worn so substantially that the gap cannot be adjusted to this clearance. Make sure employees conduct a ring test before a new wheel is placed on a grinder.

Grinders³

- Grinding wheels or other abrasive-wheel machines must meet the grinder's specifications and must not be notched or otherwise altered.
- Never use grinders or other abrasive wheel machines that lack appropriate guards.
- Remove altered or damaged grinding wheels from service; give them to your supervisor.
- Ring test a new grinding wheel before installing it.
- Never grind on the side of a grinding wheel.
- Grind soft metals such as aluminum only on wheels designed for those metals.
- Never adjust a guard while a wheel is in motion.
- Make sure that guards cover the sides, spindle-end, nut, and flange projections of a grinding wheel.
- To prevent work from being jammed between the wheel and the rest, use work rests to support the work; adjust them to no more than 1/8 inch from the wheel.
- Provide tongue guards at the opening of an abrasive wheel where the operator stands. Adjust tongue guards to not more than 1/4 inch from the wheel.

Sources:

¹ OSHA Hazard Information Bulletins, April 10, 1990, Safety Hazard Information Bulletin on Bench Grinders

² EL-801, Supervisor's Safety Handbook, 6-6

³ EL-803, Maintenance Employee's Guide to Safety, SECTION XVI — Machine Work, B