SUBJECT: Abrasive Wheels, Work Rests, Guards, and Tongue Guards

Purpose: To establish uniform compliance guidelines and standard clarifications for abrasive wheels, work rests, tongue guards, and portable grinders. To clarify guarding of abrasive wheels to include the correct positioning of the work rest and tongue guard.

Scope: This instruction applies MNOSHA wide.

References: 1910.215, Abrasive Wheel Machinery
1910.243, Guarding of Portable Powered Tools
ANSI B7.1-2000, Safety Code for Abrasive Wheels


ACTION:

A. The OSHI must first determine if the equipment is exempted from the guarding requirements. The following is a partial list of abrasive wheels that are exempt from the standards:

1. Wheels used for internal work while within the work being ground;
2. Mounted wheels used in portable operations, two inches and smaller in diameter;
3. Types 16, 17, 18, 18R and 19 cones, plugs, and threaded hole pot balls where the work offers protection;
4. Natural sandstone wheels and metal, wooden, cloth, or paper discs, having a layer of abrasive on the surface;
5. Spindle end, nut, and outer flange need not be guarded if the work provides a suitable measure of protection to the operator.

B. If the piece of equipment is not exempt and is in service, then cite for the appropriate hazard, such as but not limited to:

1. Stationary Grinders
   a. Spindle nut exposed - 1910.215(a)(2);
   b. Work rest not properly adjusted to within 1/8" of wheel, or missing - 1910.215(a)(4);
   c. Tongue guard not properly adjusted to within 1/4" of wheel, or missing - 1910.215(b)(9);
   d. Exposed shaft - 1910.219(c)(2)(i).
2. **Portable Grinders**
   
a. Spindle nut not protected - 1910.243(c)(1)(ii)(a);

b. Right angle head grinder guard exposure angle exceeds 180° - 1910.243(c)(3).

**NOTE:** This is **not** meant to be an all-inclusive list of items that can be cited on grinders, merely a guide to some of the more commonly cited items.