WAC 296-304-08007 Abrasive wheels. (1) Floor stand and bench mounted abrasive wheels used for external grinding must be provided with safety guards (protection hoods). The maximum angular exposure of the grinding wheel periphery and sides must be not more than 90 degrees, except that when work requires contact with the wheel below the horizontal plane of the spindle, the angular exposure must not exceed 125 degrees. In either case the exposure must begin not more than 65 degrees above the horizontal plane of the spindle. Safety guards must be strong enough to withstand the effect of a bursting wheel.

(2) Floor and bench mounted grinders must be provided with work rests which are rigidly supported and readily adjustable. Such work rests must be kept a distance not to exceed 1/8 inch from the surface of the wheel.

(3) Cup type wheels used for external grinding must be protected by either a revolving cup guard or a band type guard in accordance with the provisions of the United States of American Standard Safety Code for the Use, Care, and Protection of Abrasive Wheels, B7.1.1970. All other portable abrasive wheels used for external grinding must be provided with safety guards (protection hoods) meeting the requirements of (5) of this section, except as follows:

(a) When the work location makes it impossible, in which case a wheel equipped with safety flanges as described in (6) of this section must be used.

(b) When wheels 2 inches or less in diameter which are securely mounted on the end of a steel mandrel are used.

(4) Portable abrasive wheels used for internal grinding must be provided with safety flanges (protection flanges) meeting the requirements of (6) of this section, except as follows:

(a) When wheels 2 inches or less in diameter which are securely mounted on the end of a steel mandrel are used.

(b) If the wheel is entirely within the work being ground while in use.

(5) When safety guards are required, they must be mounted so as to maintain proper alignment with the wheel, and the guard and its fastenings must be of sufficient strength to retain fragments of the wheel in case of accidental breakage. The maximum angular exposure of the grinding wheel periphery and sides must not exceed 180 degrees.

(6) When safety flanges are required, they must be used only with wheels designed to fit the flanges. Only safety flanges of a type and design and properly assembled so as to insure that the pieces of the wheel will be retained in case of accidental breakage must be used.

(7) All abrasive wheels must be closely inspected and ring tested before mounting to ensure that they are free from cracks or defects.

(8) Grinding wheels must fit freely on the spindle and must not be forced on. The spindle nut must be tightened only enough to hold the wheel in place.

(9) The power supply must be sufficient to maintain the rated spindle speed under all conditions of normal grinding. The rated maximum speed of the wheel must not be exceeded.

(10) You must ensure that all employees using abrasive wheels are protected by eye protection equipment that meets the requirements of WAC 296-304-09005 (1) and (2), except when adequate eye protection is provided by eye shields permanently attached to the bench or floor stand.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 17-18-075, § 296-304-08007, filed 9/5/17, effective

10/6/17. Statutory Authority: RCW 49.17.040, [49.17].050 and [49.17].060. WSR 98-02-006, § 296-304-08007, filed 12/26/97, effective 3/1/98; Order 74-25, § 296-304-08007, filed 5/7/74.]