Guarding: Radial Arm Saws


PURPOSE: To clarify what constitutes an acceptable guard in the enforcement of radial arm saw guarding.

BACKGROUND: A. A great deal of confusion has resulted over what constitutes an acceptable means of guarding the lower exposed portion of a radial arm saw blade. The purpose of the lower guard is to protect the operator from inadvertent contact with the saw blade teeth from the side. Accidental contact with the front or rear of the saw blade is not always preventable by the lower saw guard.

B. Additional confusion has resulted from enforcement of guarding requirements for radial arm saws used to cut metal or materials other than wood under 1910.212(a)(1).

ACTION: The following criteria shall be used in judging compliance with 1910.213(h)(1) and for non-woodworking applications, such as metal, 1910.212(a)(1):

A. All radial arm saw guards shall:

1. Completely enclose the upper portion of the blade down to and including the spindle, nut, and arbor.

2. The lower guard shall guard the full perimeter of the blade on both sides. It shall guard all of the saw teeth. The sides shall be protected in the rest position and during the cutting cycle.

B. Acceptable lower guards may have the following characteristics provided they meet the requirements of A. above.
1. A floating ring rim type that automatically adjusts to the thickness of the material being cut.

2. A segmented type guard that automatically adjusts, provided it does not have enough flexibility to contact the saw blade when the saw is in a bevel position. Segmented guards shall be constructed of material soft enough so that it will be unlikely to cause tooth breakage (see 1910.212(a)(1)).

3. A fixed barrier guard, manually adjustable (sometimes referred to as a "Bailey Guard," or a "Speed Cut Barrier Guard") provided:
   a. The guard shall project at least eight inches in front of and on both sides of the saw blade.
   b. The guard is kept in adjustment so that the saw blade is enclosed except for the working portion of the blade. Both sides of the blade shall be guarded.
   c. The operator has received and follows instructions in the use of the guard.
   d. The full perimeter of the saw blade is guarded. It is expected that many barrier guards presently in use will require a modification to meet this requirement.

C. Under no circumstances is a pocket guard acceptable as the sole means of guarding. By definition, a pocket guard provides worker protection only when the saw is in the rest position.

D. Other equivalent means such as jigs, work holders, etc., must provide equivalent protection of those guards as provided in (A) and (B) above.

E. If the employer believes the guard in use creates a hazard, a more suitable guard for that particular setup should be designed. However, under no circumstances is the employer relieved of their responsibility to guard the lower exposed portion of the saw blades.

F. Unless otherwise documented by the compliance officer, an unguarded lower saw blade or an improperly adjusted guard shall be cited serious.

**EFFECTIVE**