

South Carolina Department of Labor, Licensing and Regulation
Division of Labor
Office of Occupational Safety and Health
Columbia, South Carolina 29211

OSH Program Directive Number 94-1910.212-9 (Revised)

Subject: Subarticle 6, § 1910.212 (a) (1);
As Applies to Three Roller Printing Ink Mills.

Standard: Subarticle 6, § 1910.212 (a) (1), Rules and Regulations,
Commissioner of Labor, State of South Carolina.

**Cross Reference to
Federal Standards:** 29 CFR 1910.212 (a) (1).

Cancellation: Existing Program Directive Number 78-1910.212-9, dated
December 29, 1978, is cancelled.

Background: The purpose of this directive is to clarify the guarding
requirements of the subject standard relative to the ingoing nip
point on three-roller printing ink mills and to assure uniformity in
the enforcement of the standard.

- a. It has been brought to the attention of the National OSHA Office that citations have been issued for lack of nip point guards on three-roller printing ink mills. The National Association of Print Ink Manufacturers, Inc. contends that it is not feasible to operate the three-roller printing ink mills with a nip point guard due to the required operating procedures to obtain a homogenous ink.
- b. There is an American National Consensus Standard, ANSI B177.1-1975, Safety Requirements for Three Roller Printing Ink Mills and a final supplement (dated January 9, 1979) which clarifies that a nip point guard is required on the mill only during the wash-up operation. ANSI has proposed to revise ANSI B177.1-1975 tentatively in 1994. The proposed standard may incorporate the 1979 supplement as part of the standard. During the wash-up operation the pressure on the rollers is released just enough for loose contact. With the mill running at its lowest speed, the operator holds the cleaning and drying cloth against the roller. A nip point guard prevents the cloth from getting between the roller and possibly drawing in the operator's fingers or hand.

Interpretation:

The following requirements meet the intent of Section 1910.212 (a) (1) for protection of operators of three-roller printing ink mills:

- a. All three-roller printing ink mills shall be equipped with a sufficient number of safety controls and emergency stops such as pressure-sensitive body bar, safety trip-rod, safety trip cable or wire cord at each work station. The number of safety controls and emergency stops and the location will depend on the mill size (length of the rollers) and the operator's exposure to the ingoing nip point at each work station.
- b. All mills that require the operator to use knives or spatulas to hand-feed the ink onto the feed roller or to throw-back mill ends (spread the ink on the feed roller) shall have knives or spatulas at least 18 inches long.
- c. All mills that are fed from the apron side with tub tilter and require a platform shall be provided with a bar in front of the feed roller or an expanded metal guard in front of the work platform.
- d. Each mill shall be provided with one of the following nip point guards or equivalent which shall be used during the mill wash-up operation:
 - (1) A trapezoid shaped guard of hardwood, nylon, or Teflon which is one inch longer than the roller surface length.
 - (2) A V-shaped metal guard equipped with vertical hangers that allows suspension from overhead or from the side of the mill and is one inch longer than the roller surface length.
 - (3) A metal folding flat-plate guard that extends across the entire nip point area of the rollers. The guard shall ride on the rollers in such a manner that it prevents access to the nip point area.

Effective Date:

This instruction is effective upon receipt and will remain in effect until cancelled or superseded by amendment to the Rules and Regulations.

William M. Lybrand, Administrator
September 9, 1994