



VOSH PROGRAM DIRECTIVE: 02-217

ISSUED: September 1, 1994

SUBJECT: Guarding of Three-Roller Printing Ink Mills

A. Purpose.

This directive transmits to field personnel clarification of the guarding requirements of §1910.212(a)(1) relative to the ingoing nip point on three-roller printing ink mills.

This Program Directive is an internal guideline, not a statutory or regulatory rule, and is intended to provide instructions to VOSH personnel regarding internal operation of the Virginia Occupational Safety and Health Program and is solely for the benefit of the program. This document is not subject to the Virginia Register Act or the Administrative Process Act; it does not have general application and is not being enforced as having the force of law.

B. Scope.

This directive applies to all VOSH personnel.

C. References.

OSHA Instruction STD 1-12.23A (July 12, 1994).

VOSH Standards for General Industry, § 1910.212(a)(1).

ANSI B177.1-1975, Safety Requirements for Three Roller Printing Ink Mills and Supplement (January 9, 1979)

D. Cancellation.

Not Applicable.

E. Action.

Directors and Supervisors shall assure compliance officers and employers understand and comply with the requirements of this directive.

F. Effective Date.

September 1, 1994

G. Expiration Date.

Not Applicable.

H. Background.

Citations have been issued for lack of nip point guards on three-roller printing ink mills, despite the contention by the National Association of Printing Ink Manufacturers, Inc., that it is not feasible to operate the three-roller printing ink mills with a nip point guard because of the required operating procedures to obtain a homogenous ink.

American National Consensus Standard (ANSI) B177.1-1975, Safety Requirements for Three Roller Printing Ink Mills and a final supplement (dated January 9, 1979) clarify that a nip point guard is required on the mill only during the wash-up operation.

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 in between the rollers and possibly drawing in the operator's fingers or hand.

I. Procedures.

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

- (1) 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 on the operator's exposure to the ingoing nip point at each work station.
- (2) 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.
- (3) All mills that are fed from the apron side with tub tilters 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.
- (4) 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:

- (i) A trapezoid-shaped guard or hardwood, nylon, or teflon which is one inch longer than the roller surface length.
- (ii) 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.
- (iii) 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.

Theron J. Bell
Commissioner

Attachment: None.

Distribution: Commissioner of Labor and Industry
Directors and Supervisors
Consultation Services Staff
Training Staff
OSHA Regional Administrator, Region III