

OSHA Directives

STD 1-12.23A - Guarding of Three-Roller Printing Ink Mills

- **Record Type:** Instruction
 - **Directive Number:** STD 1-12.23A
 - **Subject:** Guarding of Three-Roller Printing Ink Mills
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OSHA Instruction STD 1-12.23A

July 12, 1994

Office of General Industry

Compliance Assistance

Subject: Guarding of Three-Roller Printing Ink Mills

A. **Purpose.** The purpose of this instruction 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 nationally.

B. **Scope.** This instruction applies OSHA-wide.

C. **Reference.** 29 CFR 1910.212(a)(1)

D. **Cancellation.** OSHA Instruction STD 1-12.23, January 2, 1979, is canceled.

E. **Action.** The following requirements meet the intent of 29 CFR 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 Bill 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.

F. Background.

(1) It has been brought to the attention of the National Office that citations have been issued for lack of nip point guards on three-roller printing ink mills. The National Association of Printing 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.

(2) 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 B77.1-1975 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 in between the rollers and possibly drawing in the operator's fingers or hand.

G. Federal Program Change. This instruction describes a Federal program change which affects State programs. Each Regional Administrator shall:

1. Ensure that this change is promptly forwarded to each State designee, using a format consistent with the Plan Change-Two-way Memorandum in Appendix P, OSHA Instruction STP 2.22A, CH-2.

2. Explain the technical content of the change to the State designee as requested.

3. Ensure that State designees are asked to acknowledge receipt of the Federal program change in writing to the Regional Administrator as soon as the State's intention is known, but no later than 70 calendar days after the date of issuance (10 days for mailing and 60 days for response).
4. This acknowledgement should include a description either of the State's plan to follow the guidelines in this Instruction or of the reasons why the change should not apply to that State.
5. Advise the State designees that a plan supplement is not required for implementation of this change. However, if the State's interpretation of its standard is different from OSHA's, the State shall submit a copy of its interpretation to the Regional Administrator.

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