DEPARTMENT OF LABOR AND INDUSTRY

MNOSHA Instruction **STD 1-12.23D**
February 25, 2026

# SUBJECT: Guarding of Three-Roller Printing Ink Mills

## 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.

## Scope:

This instruction applies MNOSHA-wide.

## References:

1. General Industry Regulations & Standards, 29 CFR 1910.212(a)(1): Machine guarding - Types of Guarding
2. General Industry Regulations & Standards, 29 CFR 1910.216(f)(2): Stopping limits for mills
3. American National Standards Institute, Inc. (ANSI) Standards ANSI B65/NAPIM 177.1-2007 (Revised 2018): Safety Standard – Three-roll printing ink mills

## Cancellation:

This directive supersedes STD 1-12.23C, issued February 11, 2021.

## Background:

Federal OSHA was contacted by the National Association of Printing Ink Manufacturers, Inc., following the issuance of citations for lack of nip point guards on three-roller printing ink mills. The Association 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.

ANSI B65/NAPIM 177.1-2007 (Revised 2018): Safety Standard – Three-roll printing ink mills states:

> "A nip point guard shall be set into the nip point by the authorized person(s) prior to the wash-up operation. Its function is to accomplish physical guarding of the entire nip point area when the rolls of a three-roll printing ink mill are being cleaned."

## 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 one or more emergency stop devices at positions accessible to the authorized person or other personnel at all times. The emergency stop device may be a button, pressure-sensitive body bar, safety trip rod, safety trip cable, chain, or wire cord. 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. If a knife or spatula is used, the length of the knife or spatula, not including the handle, shall be at least equal to or greater than one-half the diameter of the rolls.

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. The platform shall be equipped with slip resistant safety steps and surfaces, and guard railings.

4. Each mill shall be provided with a nip point guard which is interlocked with the emergency stop function and shall be used during the mill wash-up operation. The maximum nip guard gap shall not exceed ¼", and the guard shall protect the entire length of the nip point.
   NOTE: Small-scale (12-inches or less), non-production mills are excluded from the nip-point interlock requirement.

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For the MNOSHA Management Team

Distribution: OSHA Compliance and WSC Director

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