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:

1910.212(a) (1), 1910.216 (f) (2) & ANSI B65/NAPIM 177.1-2018

Cancellation:

This directive supersedes STD 1-12.23, issued January 23, 2013.

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 177.1-2018, a Revision of ANSI B177.1-2007, 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 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.

4. Each mill shall be provided with a nip point guard which 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.

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For the MNOSHA Management Team

Distribution: OSHA Compliance and WSC Director

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