



MNOSHA Instruction **STD 1-12.20A**

October 13, 2025

SUBJECT: Safeguarding Vertical Food Mixers

Purpose:

To provide guidelines for the enforcement of safeguarding on vertical food mixers.

Scope:

This directive applies MNOSHA-wide.

References:

1. [MN Rule 5205.0860](#) – Machines with Revolving Parts
2. NSF International Standard / American National Standard NSF/ANSI 8 - 2023 Commercial Powered Food Preparation Equipment
3. [Federal OSHA Standard Interpretation dated 02/26/1999](#), “OSHA enforcement policy on vertical food mixers.”
4. [Occupational Safety and Health Review Commission Docket# 93-1853 dated 11/07/1997](#), “Secretary of Labor, V. Fabricated Metal Products, Inc.”
5. [Occupational Safety and Health Review Commission Docket# 01-0202 & 01-0427 dated 03/15/2005](#), “Secretary of Labor, V. South Dakota Beverly Enterprises, Inc. D/B/A/ Beverly Health Care Bella Vista Nursing Home, and 01-427 Commercial Management, Inc. D/B/A/ Beverly Health Care – Ipswich”
6. [Occupational Safety and Health Review Commission Docket# 03-2097 dated 04/05/2005](#), “Secretary of Labor, V. Buffets, Inc., d/b/a Old Country Buffet”
7. [Occupational Safety and Health Review Commission Docket# 03-1072 dated 04/05/2005](#), “Secretary of Labor, V. SAFEWAY #255, and its successors”

Cancellation:

This directive supersedes STD 1-12.20 dated January 13, 2016.

Background:

OSHA is required to prove that an employee is exposed to the hazard being cited. CSHOs are required to document observed hazards through interviews, measurements, sketches, and photos to show how and why a

standard is allegedly violated, how employees of the employer are exposed to the hazard, how the employer knew or should have known of the existence of the hazard, and what kind of accident could be reasonably predicted to occur from the hazard.

The Federal Occupational Safety & Health Review Commission's test for establishing exposure in machine guarding cases is quite stringent and states:

"....in order for the Secretary to establish employee exposure to a hazard she must show that it is reasonably predictable either by operational necessity or otherwise (including inadvertence), that employees have been, are, or will be in the zone of danger. We emphasize that, as we stated in Rockwell, the inquiry is not simply into whether exposure is theoretically possible. Rather, the question is whether employee entry into the danger zone is reasonably predictable."

The Commission will usually not find there to be a reasonable predictability of inadvertent contact unless the employee's hands are in the "immediate vicinity" of the hazardous area. Two Review Commission decisions show how this test has been applied in the context of vertical mixers. In Station 104, Inc., the judge held the mixing bowl of the vertical mixer guarded the dough hook's point of operation and the exposed part of the agitator remained well within the protective circumference of the bowl. In Top Taste Bakeries, Inc. the judge held there was a lack of proof of significant risk of injury given the vertical mixer's location and method of operation and the low incidence of actual injuries.

ACTION:

A. Standards

OSHA standard, [29 CFR 1910.263: Bakery Equipment](#) does not address point-of-operation and rotating-part hazards created by vertical food mixers. However, these hazards are covered by [MN Rule 5205.0860](#) when machines with rotating parts:

1. is not being used in a research laboratory or
2. has more than one-quarter HP driving motors

Normally, when the rotating parts above the point of operation are guarded as required by [MN Rule 5205.0860](#), hazards at the point of operation are also protected.

B. Factors

Some factors that must be taken into consideration when evaluating exposure to a vertical mixer's hazards such as point-of-operation, ingoing nip points, and rotating parts, include:

1. How the mixer functions (e.g., visibility of agitator, ability to accidentally switch on, etc.);
2. How worker performs operations (e.g., adding ingredients, scraping the bowl, checking dough for consistency);

3. Distance worker is from point-of-operation hazard or rotating part – how close does worker get to hazard during operation;
4. Tools (such as scrapers or measuring cups, bowls, or other containers used to pour ingredients into the bowl of the mixer), clothing, jewelry, or hair of worker that might get caught or fall into mixer;
5. Type of guarding in place or provided, if any;
6. Any slipping or tripping hazards in the area.

C. Citation Policy

1. When there is employee exposure to any of the normal production hazards mentioned in [MN Rule 5205.0860](#), one or more methods of machine guarding shall be provided, as appropriate, to protect the exposed workers. For example, when there is employee exposure to a normal production point-of-operation hazard, the CSHO shall cite [MN Rule 5205.0860 subp. 2](#) and document employee exposure when the point of operation of a vertical mixer is not properly guarded, or if guarding is not feasible and there is no effective safeguarding work practice in place.
2. Safeguarding a worker from potential exposure to the machinery hazards of a mixer must be provided by a cover, hatch, or grate with an interlocking device that will prevent the cover, hatch, or grate from being opened while the rotating parts are in motion, and will also prevent the power operation of the machine while the cover, hatch, or grating is not fully closed and secured. When safeguarding by barrier guard or a safeguarding device is not feasible, safeguarding by maintaining a safe distance may be used.
 - a. Work practices are not to be used in lieu of necessary machine guarding when guarding is feasible.
 - b. Replacement of old mixers with new units, which have the required safeguarding, is an option employers have when the old mixers cannot be upgraded or retrofitted with the safeguarding.
3. Hazards may also exist during servicing and maintenance operations of vertical food mixers in which hazardous energy could cause injury to employees. The lockout/tagout standard, [29 CFR 1910.147](#), covers servicing and maintenance which takes place during normal production operations, if and only if either of the circumstances set forth in [29 CFR 1910.147\(a\)\(2\)\(ii\)\(A\)](#) and [29 CFR 1910.147\(a\)\(2\)\(ii\)\(B\)](#) apply. Additionally, this standard applies when there is a potential for unexpected activation or start-up, the machine can be deenergized to perform the servicing or maintenance, and there is employee hazardous energy exposure. If [29 CFR 1910.147](#) applies, the vertical mixers must be deenergized and be locked or tagged out in accordance with the procedures required by the standard.
4. If the vertical mixer's power source is a flexible cord, lockout or tag out of the machine is not required if the provisions of [29 CFR 1910.147\(a\)\(2\)\(iii\)\(A\)](#) are met for cord and plug connected equipment. The exemption is predicated on the assumption that the use of the flexible cord is approved and suitable for the conditions of use and location as detailed in [29 CFR 1910.305\(g\)](#).

James Krueger, Director MNOSHA Compliance

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For the MNOSHA Management Team

Distribution: OSHA Enforcement and Director OSHA Consultation

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