DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS CONSUMER AND INDUSTRY SERVICES

DIRECTOR'S OFFICE BUREAU OF SAFETY AND REGULATION

GENERAL INDUSTRY SAFETY **AND HEALTH STANDARD STANDARDS**COMMISSION

Filed with the Secretary of State on

These rules take effect immediately upon filing with the secretary of state unless adopted under section 33, 44, or 45a(6) of the administrative procedures act of 1969, 1969 PA 306, MCL 24.233, 24.244, or 24.245a. Rules adopted under these sections become effective 7 days after filing with the secretary of state.

(By authority conferred on the director of the department of licensing and regulatory affairs by sections 16 and 21 of the Michigan occupational safety and health act, 1974 PA 154, MCL 408.1016 and 408.1021, and Executive Reorganization Order Nos. 1996-2, 2003-1, 2008-4, and 2011-4, MCL 445.2001, 445.2011, 445.2025, and 445.2030) general industry safety standards commission by sections 16 and 21 of Act No. 154 of the Public Acts of 1974, as amended, being SS408.1016 and 408.1021 of the Michigan Compiled Laws)

R 408.12616, R 408.12631, R 408.12633, R 408.12638, R 408.12639, and R 408.12642 of the Michigan Administrative Code are amended as follows:

GENERAL INDUSTRY SAFETY AND HEALTH STANDARD PART 26. METALWORKING MACHINERY

R 408.12616 Machine and equipment installation.

Rule 2616. (1) A metalworking machine or equipment shall be installed so that the normal operator's position is not in an aisle, or the employee shall be protected by a **guardrail system** standard barrier as prescribed in **compliance with General Industry Safety and Health Standard Part 2 "Walking-Working Surfaces,"** rule 231 of the occupational safety standards commission standard, Part 2. Floor and Wall Openings, Stairways and Skylights, being R 408.10231 R 408.10201 to R 408.10241 of the Michigan Administrative Code.

- (2) Metalworking machines and equipment, except portable types, shall be fastened to a floor, platform or bench to prevent tipping or inadvertent movement, or be equipped with nonslip pads.
- (3) Electrically powered metalworking machines and equipment shall be grounded.
- (4) Provision shall be made to prevent metalworking machines and equipment from automatically restarting upon restoration of power after a power interruption, if such restart would be hazardous.

R 408.12631 Squaring shear.

Rule 2631. (1) **An employer shall ensure that a** A squaring shear, mechanical or manual, shall have 1 of the following:

- (a) The blade and hold-down clamp guarded by a fixed barrier set in accordance with **Figure 1.**
- (b) Automatic clamps set within 1/4 inch of the table or stock with the cutouts filled in so that the fingers of the operator cannot enter the pinch point.
- (c) A self-adjusting barrier with a limit of not more than 1/4 inch above the table or material.
- (2) Where small stock is being sheared, a pusher stick shall be provided and used.
- (3) An employee tending the backside of a squaring shear shall be separated from the moving parts by a table, rack or chute, such as the back gauge, shear blade or work piece on **that** which the sheared stock shall fall before being handled, or the point of operation shall be guarded as prescribed in subdivision (a) of subrule (1). The table, rack or chute shall maintain the employee's position not less than 3 feet from the point of operation or a hazardous moving part.
- (4) An automatically fed squaring shear shall be guarded by a barrier so located to prevent access to the point of operation. The guard may be swung aside for hand feeding, providing the control is on inch setting.

FIGURE 1

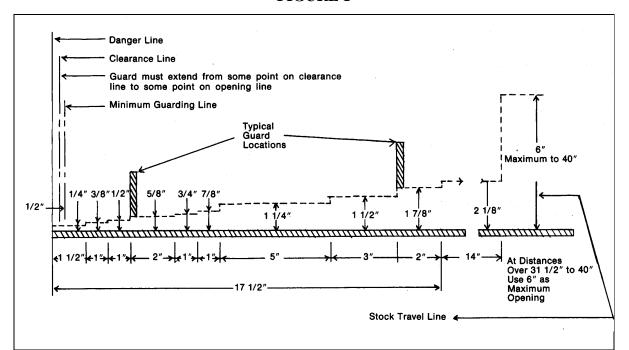


Fig. 1 shows the accepted safe openings between the bottom edge of a guard and feed table at various distances from the danger line (point of operation).

The *clearance line* marks the distance required to prevent contact between the guard and moving parts.

The *minimum guarding line* is the distance between the infeed side of the guard and the danger line that is 1/2 inch from the danger line.

The various openings are such that for average size hands, an operator's fingers will not reach the point of operation.

After installation of point of operation guards and before a job is released for operation, a check shall be made to verify that the guard will prevent the operator's hands from reaching the point of operation.

R 408.12633 Bar stock and rod machines; screw machines; tread machines.

Rule 2633. A bar stock and rod machine, screw machine or thread machine shall have the bar stock that extends beyond the machine guarded by a trough or tube or guarded by a **guardrail system** standard barrier as prescribed in **compliance with General Industry Safety and Health Standard Part 2 "Walking-Working Surfaces,"** Part 2. Floor and Wall Openings, Stairways, and Skylights, being R 408.10201 **to R 408.10241** et seq. of the Michigan Administrative Code.

R 408.12638 Wire drawing machines.

Rule 2638. (1) **An employer shall ensure that a A** wire drawing machine shall have 1 of the following:

(a) An emergency stop device adjacent to the block available to shut down the machine.

- (b) An emergency stop device, such as a bar, rope or cable, along the operating side of a continuous drawing frame or unit so designed that the device will stop the machine at any point along the unit. When an emergency stop device has been actuated, the machine shall be restarted manually.
- (2) The live block, capstan and straightening rolls of a wire drawing machine shall be enclosed with a barrier guard.
- (3) A wire drawing machine shall be equipped with a stopping device so arranged to stop the block automatically if the operator can be caught in the wire or the reel drawn to the machine, or the area from and including the payoff to the machine shall be enclosed with a guardrail system standard barrier as prescribed in compliance with General Industry Safety and Health Standard Part 2 "Walking-Working Surfaces," being R 408.10201 to R 408.10241 of the Michigan Administrative Code. R 408.1231 of Part 2. Floor and Wall Openings, Stairways and Skylights. The stop device shall be as prescribed in subdivision (b) of subrule (1).
- (4) Where straightening rolls are not used, a snarl switch interlocked with the live block or capstan shall be provided.
- (5) A pinch point less than 8 feet from a floor or platform, created by the moving wire or rod passing over or through the equipment, shall be guarded by a barrier if exposed to contact.
- (6) All barrier guards or enclosures **that** which can be removed or opened without tools shall be interlocked with the live block or capstan.
- (7) A pinch pointer used to prepare wire or rod for insertion into a die shall be guarded if the opening is more than 1/4 larger than the material being fed into it.

R 408.12639 Boring, honing, reaming, and drilling.

- Rule 2639. (1) **An employer shall ensure that when When** boring, honing, reaming, or drilling, all of the following provisions apply:
- (a) Except for hand-held honing, the workpiece shall be secured by a device to prevent it from being turned by the tool.
- (b) Manual measuring at the point of operation shall be done only when the tool or rotating workpiece has stopped.
- (c) A vertical metal cutting machine with a rotary table shall have a rim guard either fixed or portable around the table of a height to cover any pinch point or rotating hazard at the lower side and to a point not less than 2 inches above the workpiece or fixture, whichever is higher. Where the rotating table is at floor level, a removable **guardrail system** standard barrier shall be installed as prescribed in **General Industry Safety and Health Standard** Part 2 "Walking-Working Surfaces," rule 231 of the general industry safety standards commission standard, Part 2. Floor and Wall Openings, Stairways, and Skylights, being R 408.10201 to R 408.10241 R 408.10231 of the Michigan Administrative Code.
- (d) Multiple-spindle heads, except when used for tapping and those with cam-operated slides, shall have an emergency return control at each station.
- (2) A chuck key that is used on a drill press should be as prescribed in R 408.12648(2).

R 408.12642 Powered benders.

Rule 2642. (1) **An employer shall ensure that a** A powered bender shall have 1 of the following:

- (a) A barrier or enclosure guard that is designed to protect the operator from the pinch points when clamping parts in the bender.
- (b) A single-stroke hand control device that can be activated with 1 hand holding the workpiece, remote from the pinch points, when clamping parts in the bender, or a single-stroke foot control device where both hands hold the workpiece, remote from the clamping pinch point.
- (c) A 2-hand, single-stroke control device.
- (2) Where the sweep of the stock intrudes into the aisle or work area of another employee or endangers the operator or other employees, an employer shall provide a guardrail system standard barrier, as in compliance with General Industry Safety and Health Standard Part 2 "Walking-Working Surfaces," specified in rule 231 of the general industry safety standards commission standard, Part 2. Floor and Wall Openings, Stairways, and Skylights, being R 408.10201 to R 408.10241 R 408.10231 of the Michigan Administrative Code. Code, shall be provided.