DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

DIRECTOR'S OFFICE

GENERAL INDUSTRY SAFETY STANDARDS

(By authority conferred on the director of the department of licensing and regulatory affairs by sections 16 and 21 of 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)

PART 71. LAUNDRY AND DRY CLEANING MACHINERY AND OPERATIONS

GENERAL PROVISIONS

R 408.17101 Scope.

Rule 7101. This part provides for the safe maintenance and operation of laundry and dry cleaning machinery and equipment by the employer and their safe use by an employee in, around, and about a place of employment.

History: 1979 AC.

R 408.17103 Definitions; A to E.

Rule 7103. (1) "Aisle" means a path of travel for employees and material handling equipment.

(2) "Beater" means a device for relieving wrinkles in fabrics.

(3) "Centrifugal extractor" means a power driven machine used to remove surplus moisture from fabrics by centrifugal action.

(4) "Dampening machine" means a machine for dampening fabrics.

(5) "Dry cleaning" means the process of cleaning fabrics by use of nonaqueous liquid solvents in machines and may include the drying and pressing of them.

History: 1979 AC.

R 408.17104 Definitions; F to H.

Rule 7104. (1) "Fabrics" means clothing, household items and other articles made from textiles.

(2) "Flammable solvent" means a liquid which has a flash point less than 140 degrees Fahrenheit.

(3) "Folding machine" means a machine which folds fabrics.

(4) "Hot patch machine" means equipment which applies a patch or label to fabric by use of heat and pressure.

History: 1979 AC.

R 408.17105 Definitions; I to M.

Rule 7105. (1) "Ironer" means a hand or power operated machine with 1 or more rolls or heated surfaces in contact for drying and smoothing fabrics.

(2) "Laundromat" means an establishment having washing machines, drying tumblers, dry cleaning machines, extractors or presses which may be operated by an employee or the public.

(3) "Laundry" means an establishment where the cleaning of fabrics is accomplished by use of water, soaps or detergents in machines and may include the drying, starching and ironing of them.

(4) "Marking machine" means a machine used for marking fabrics.

History: 1979 AC.

R 408.17106 Definitions; P.

Rule 7106. (1) "pH" means to express numerically the degree of acidity or alkalinity of a solution with neutrality indicated as 7. A number lower than 7 would mean increasing acidity and a number greater than 7 would mean increasing alkalinity.

(2) "Personal protective equipment" means the apparel worn by the employee to protect his person from injury.

(3) "Pinch point" means a point at which it is possible to be caught between the moving parts of a machine or between moving and stationary parts of a machine.

(4) "Point of operation" means the area of a machine where material is actually worked.

(5) "Power wringer" means a machine with 1 or more rolls used for removing surplus moisture from fabrics.

History: 1979 AC.

R 408.17107 Definitions; S, T.

Rule 7107. (1) "Safety factor" means the ratio of the breaking strength of a piece of material or object to the maximum designed load or stress when in use.

(2) "Screw conveyor" means a fixed powered rotating device suspended above a floor or platform used to convey fabrics on hangers.

(3) "Squeeze extractor" means a machine which removes excess liquid by a compacting or squeezing action.

(4) "Starching machine" means a power driven machine used for starching fabrics.

(5) "Tying machine" means equipment which automatically ties bundles.

(6) "Tumbler" means a machine used to shake out, condition or dry fabrics by tumbling them in a revolving cylinder.

History: 1979 AC.

R 408.17111 Employer responsibility.

Rule 7111. An employer shall do all of the following:

(a) Provide training to an employee as to the hazards and safe operation of the assigned job.

(b) Maintain machinery, building, ramp, platform, and aisles in a condition free of recognized hazards.

(c) Provide face and eye protection, as prescribed in Part 33. Personal Protective Equipment, being R 408.13301 et seq. of the Michigan Administrative Code.

(d) Provide to an employee, at no expense to the employee, aprons, gloves, and other protective equipment where an acid having a pH of less than 4.0 or a caustic having a pH of greater than 10.0 is handled.

History: 1979 AC; 1981 AACS; 1983 AACS.

R 408.17112 Employee responsibility.

Rule 7112. An employee shall:

(a) Use personal protective equipment when furnished by the employer.

(b) Not use machinery or equipment unless authorized and trained in its use.

(c) Not remove guards from machinery and equipment except when necessary for servicing. The guard shall be replaced before restarting the machine.

(d) Report defective machinery, equipment and hazardous conditions, when detected, to the employer.

History: 1979 AC.

R 408.17121 Illumination.

Rule 7121. Illumination shall be provided at the operator's work station to maintain a minimum of 20 footcandle intensity.

History: 1979 AC.

R 408.17122 Floors and aisles.

Rule 7122. An aisle for combined usage of an employee and powered stock moving equipment shall be 3 feet wider than the widest load moved. The outline of the aisle shall be marked or otherwise indicated.

History: 1979 AC; 1981 AACS.

R 408.17123 Rescinded.

History: 1979 AC; 1982 AACS; 1983 AACS.

R 408.17124 Rescinded.

History: 1979 AC; 1982 AACS; 1983 AACS.

R 408.17125 Rescinded.

History: 1979 AC; 1981 AACS; 2013 AACS.

R 408.17126 Hot surfaces.

Rule 7126. Steam and hot water pipes and surfaces of machinery, except those coming into contact with the fabric being processed, which would cause burns if exposed to contact shall be covered with a heat resistive or insulating material or guarded by a barrier.

History: 1979 AC.

R 408.17127 Relief valves.

Rule 7127. (1) Where a pressure reducing valve is used, not less than 1 relief valve shall be provided adjacent to the reducing valve on the low pressure side.

(2) The relief valve shall vent to an area which will not create a hazard to an employee. The vent shall be the same size as the relief valve outlet and as short and direct as possible.

(3) The combined discharge capacity of relief valves shall be such that the pressure rating of the lower pressure piping and equipment will not be exceeded if the reducing valve should fail to function.

History: 1979 AC.

R 408.17128 Steam pressure procedures.

Rule 7128. (1) Steam valves to machinery shall be cracked open for several minutes and then opened slowly to avoid uneven expansion of a pressure chamber.

(2) The rated operating steam pressure of a machine shall not be exceeded.

History: 1979 AC.

R 408.17129 Hydraulic safety.

Rule 7129. A hydraulic system of piping, hose and their component parts shall have a designed safety factor of 4.

History: 1979 AC.

R 408.17130 Fire safety.

Rule 7130. (1) Fabrics which contain a combustible vapor or fluid first shall be rinsed in cold water or maintained not less than 25 feet from spark producing equipment or open flame.

(2) Smoking shall be prohibited except in designated areas. "NO SMOKING" signs shall be posted in these prohibited areas.

History: 1979 AC.

R 408.17131 Material handling.

Rule 7131. (1) A mechanism used to tilt tote boxes shall be enclosed by a standard barrier on 3 sides.

(2) Where a chain or cable sling or metal bale is used in connection with lifting by a powered hoist, the hook of the hoist shall be equipped with a safety latch.

(3) A screw conveyor less than 8 feet from a floor or platform shall be equipped with a barrier on each side the entire length of the conveyor.

The barrier shall project not less than 1 1/2 inches above and below the conveyor to prevent hair entanglement.

History: 1979 AC.

SPECIFIC PROVISIONS--LAUNDRY

R 408.17141 Marking machine and label remover.

Rule 7141. A marking machine or label remover with an opening of more than 1/4 inch shall be guarded by 1 of the following:

(a) A spring compression device designed to prevent injury if the fingers are caught between the marking plunger and the platen.

(b) A control device requiring concurrent use of both hands to operate the machine.

(c) A barrier designed to prevent contact with the marking plunger.

History: 1979 AC.

R 408.17142 Washing machines.

Rule 7142. (1) The outer door of a double cylinder washing machine shall be interlocked to prevent the inside cylinder from moving when the outer door is open and also to prevent opening the outer door when the inside cylinder is in motion. The use of an inch control is permissible.

(2) A single cylinder washing machine shall be guarded as prescribed in R 408.17146.

(3) A washing machine shall have a device for holding the outer and inner doors open for loading and unloading.

History: 1979 AC.

R 408.17143 Extractors.

Rule 7143. (1) A rotating extractor shall be equipped with a metal cover interlocked in a manner so as to prevent opening it when the basket is in motion or to prevent power operation of the basket when the cover is open.

(2) A rotating extractor shall not be operated at a speed in excess of the rated speed, which speed shall be permanently marked on the machine.

Where the rated speed is not available, table 1 shall be followed:

(3) A rotating extractor shall be:

(a) Equipped with a braking device.

(b) Secured to the floor or foundation to prevent lateral movement.

(c) Loaded in a manner to keep the extractor in balance.

(d) Inspected not less than once a year at points of wear such as, but not limited to, the basket, rings, and cover, and repaired where defects that are a hazard are found.

(4) A squeeze extractor shall be equipped with:

(a) A cover interlocked to the compacting mechanism which shall prevent the removal of the cover until the pressure has been relieved.

(b) A 2-hand control device which shall be operated concurrently to activate the cover placement.

(5) A steam, hydraulic, or pneumatic-type squeeze extractor shall be equipped with a pressure relief valve set to open if the applied pressure is 10% more than the maximum rated operating pressure. The maximum operating pressure shall be permanently labeled or marked on the machine.

(6) Table 1 reads as follows:

TABLE 1

30-inch diameter extractor -- 1200 r.p.m.
40-inch diameter extractor -- 900 r.p.m.
48-inch diameter extractor -- 750 r.p.m.
60-inch diameter extractor -- 500 r.p.m.

History: 1979 AC; 1981 AACS.

R 408.17144 Combination washer-extractor.

Rule 7144. A combination washer-extractor shall be:

(a) Equipped with a braking device.

(b) Equipped with a steel door interlocked to the drive mechanism which will prevent opening the door while the cylinder is in motion and prevent operation while the door is open. An inch control is permissible for internal door models to aid loading and unloading.

(c) Mounted on a vibration dampening foundation or be equipped with a device which will shut off the power and apply the brake when the machine is out of balance to a hazardous degree.

(d) Equipped to maintain the doors in an open position during loading and unloading.

History: 1979 AC.

R 408.17145 Power wringer.

Rule 7145. (1) A power wringer shall be equipped with a safety bar or barrier positioned in front of and across the entire front of the first feed or pressure roll so arranged that if the bar or barrier is struck, either the machine will stop or the pressure on the rolls will be relieved.

(2) The stopping distance of the feed or pressure roll measured on the circumference shall be not more than 1/2 of the lineal distance measured from the safety bar or barrier to the pinch point.

History: 1979 AC.

R 408.17146 Starching machine.

Rule 7146. A starching machine shall be guarded by an enclosure or barrier to prevent contact with the moving cylinder or box.

History: 1979 AC.

R 408.17147 Rescinded.

History: 1979 AC; 1981 AACS; 1983 AACS.

R 408.17148 Tumblers; shake out, conditioning, and drying.

Rule 7148. (1) A tumbler shall be equipped with a safety interlock that will prevent energizing the drive motor unless the door is closed. The interlock shall allow for momentary inching the tumbler cylinder to facilitate loading and unloading.

(2) A tumbler shall be provided with a means to prevent accidental closing of the door during loading and unloading.

(3) A tumbler designed without a door, where the work is continuously loaded and discharged, is excepted from subrules (1) and (2).

(4) A single cylinder tumbler shall be guarded as prescribed in R 408.17146.

History: 1979 AC.

R 408.17149 Steam drying box and cabinets.

Rule 7149. A steam drying box or cabinet having access doors shall be equipped with both inside and outside latches.

History: 1979 AC.

R 408.17150 Dampening machine.

Rule 7150. A roll dampening machine shall be guarded in a manner which will enclose the rolls and prevent an employee's fingers from entering the pinch point.

History: 1979 AC.

R 408.17151 Beaters.

Rule 7151. A beater on a flat work ironer other than 1 using cloth or canvas beater blades, shall be guarded against accidental contact by the operator.

History: 1979 AC.

R 408.17152 Folding machine.

Rule 7152. (1) A fixed or interlocked removable barrier shall cover the moving parts of a flatwork folding machine.

(2) A small piece folding machine shall have access openings covered and interlocked to the power source, where an employee would be exposed to a hazard such as a chain or belt drive.

History: 1979 AC.

R 408.17153 Rollers and unrollers.

Rule 7153. (1) A towel roller shall be equipped with a barrier made of plastic or expanded metal electrically interlocked to the power source or interlocked to the clutch and designed to prevent entry into the pinch point created by the 2 inrunning rollers, or it shall be equipped with a 2-hand constant pressure control device.

(2) A towel unroller shall be equipped with a barrier to prevent entry of the operator's fingers into the pinch point created by the 2 inrunning rolls, or it shall be equipped with a 2-hand constant pressure control device.

History: 1979 AC.

R 408.17154 Ironers.

Rule 7154. (1) A flatwork ironer shall be equipped with a safety bar or barrier positioned in front of and across the entire front of the first feed or pressure rolls so arranged that striking of the bar or barrier will stop the machine. The stopping distance of the feed or pressure roll measured on the circumference shall be not more than 1/2 of the lineal distance measured from the safety bar or barrier to the pinch point. The ends of the pressure rolls shall be guarded by an enclosure or barrier which will prevent contact by an employee.

(2) A flatwork ironer shall be equipped with an idler roll, sometimes known as a doffer or finger roll, in front of the safety bar or barrier.

(3) A body type roll or shoe type sleeve or band ironer shall be guarded as prescribed in subrule (1). The hot roll or shoe shall be covered as prescribed in R 408.17126 to prevent contact with the heated surfaces.

(4) A rotary body and coat ironer shall be equipped with the safety bar or barrier across the entire front of the feed roll or shoe so arranged that striking the bar or barrier will stop the machine. The hot roll or shoe shall be covered as prescribed in R 408.17126 to prevent contact with the heated surface.

History: 1979 AC.

R 408.17155 Laundry press.

Rule 7155. (1) A laundry press shall be equipped with a control device requiring concurrent use of both hands until the press has closed and the locking device has taken effect.

(2) A laundry press shall be provided with an emergency release bar or button which will instantly release the locking device of the laundry press head.

History: 1979 AC.

R 408.17156 Vertical pants presser.

Rule 7156. A vertical pants presser with a fly clamp, except those manually actuated, shall be equipped with a 2-hand control device for the fly clamp and an interlocked door covering the point of operation.

History: 1979 AC.

R 408.17157 Vertical coverall or shirt press.

Rule 7157. A vertical coverall or shirt press having shoulder or yoke clamps shall be equipped with a 2-hand control device.

History: 1979 AC.

R 408.17158 Sewing machines.

Rule 7158. A sewing machine shall be equipped with a permanently attached guard which will prevent a finger from passing between the needle and the pressure foot. The guard design shall allow threading of the needle without removing the guard.

History: 1979 AC.

R 408.17159 Hot patch machine.

Rule 7159. A hot patch machine shall be equipped with a barrier to enclose the point of operation or it shall be equipped with a 2-hand control device.

History: 1979 AC.

R 408.17160 Tying machine.

Rule 7160. A tying machine shall be equipped with an enclosure guard around the path of the moving arm so designed as to eliminate any pinching between the table and the guard or the guard and the arm.

History: 1979 AC.

SPECIAL FOR DRY CLEANING

R 408.17161 Cover or door interlocks.

Rule 7161. (1) An extractor, washer or tumbler used in a dry cleaning operation shall have the covers or doors interlocked to prevent the inside cylinder from moving when the cover or door is open. On an extractor, the interlock shall also prevent the outer door being opened while the inside cylinder is in motion.

(2) A combination dry cleaning machine, wherein the washing and extraction cycles are completed within the same enclosure, shall be equipped with a splashproof cover or door which shall be interlocked as prescribed in subrule (1).

History: 1979 AC.

R 408.17162 Extractors.

Rule 7162. An extractor shall not be operated in excess of its rated speed. If the rated speed is unavailable, table 1 of R 408.17143 shall be followed.

History: 1979 AC.

R 408.17163 Dry cleaning press.

Rule 7163. (1) A dry cleaning press may be actuated by use of 1 hand, but when pressure is increased or a locking device is actuated, 2-hand controls shall be used concurrently.

(2) A dry cleaning press shall be provided with an emergency release bar or button which will instantly release the ironing press head from its closed position.

History: 1979 AC.