

(c) The dimensions of any individual face piece or lens shall be not less than (35 mm.) in the vertical direction and (42 mm.) in one horizontal direction.

(3) Eye protection against hazards listed under subsection Ind 1.81 (1) (a) (b) (c) and (d) shall meet the following drop and penetration test requirements:

(a) A spherical steel ball, 1.56 ounces in weight, approximately  $\frac{7}{8}$  inches in diameter, shall be dropped from a height of 50 inches on the center of the horizontal outer surface of the lens or face piece. This test to be made on the assembled goggle as ready for use. If one out of 6 lenses or face pieces is fractured in this test, 4 more shall be tested, and if any one of these is fractured the lot shall be rejected.

(b) A dart weighing 1.56 ounces and provided with number 25 needle-point shall be dropped from a height of 50 inches. No penetration through the lens shall be allowed at 68 degrees Fahrenheit.

(4) Eye protection against hazards listed under subsection Ind 1.81 (1) (c) and (d) shall have a minimum thickness of 0.05 inches.

(5) Side shields and frames shall be made of material of suitable durability for the protection required. No quick-burning material shall be used. The material shall be sufficiently pliable to permit adjusting the shield to the contour of the face. The edges coming in contact with the face shall be finished in a manner to prevent irritating or cutting the skin. Adequate ventilation shall be provided. All side shields shall be required to withstand the same impact test as required for face pieces or lenses, but shall not be subject to the penetration test.

(6) The term "goggles" as used herein shall mean an optical device worn before the eyes, the predominant function of which is to protect the eyes.

(7) Goggles shall be designated according to type as follows:

Type 1. One that provides protection mainly from the front.

Type 2. One that provides protection from the front and sides, but does not form a complete seal with the face.

Type 3. One that provides complete protection and forms a seal with the face for its entire periphery.

For both types 2 and 3 the maximum permissible openings in the goggles shall be  $\frac{1}{25}$  of an inch in diameter.

(a) For hazards listed under subsections Ind 1.81 (1) (a) (b) and (c) above, goggles of types 2 or 3 shall be used, except that for some metal and woodworking operations such as boring, cutting and sawing, type 1 goggles will be acceptable.

(b) For hazards listed under subsection Ind 1.81 (1) (d) above, goggles of type 3 shall be used.

(c) For hazards listed under subsection Ind 1.81 (1) (e) above, goggles of types 1, 2 or 3 with lenses of hardened glass of proper density appropriate for the particular operation may be used.

*Note:* For recommended shades of lenses see federal specifications for welders' goggles and welders' helmets.

(8) All eye protection devices shall be properly fitted, maintained in a sanitary and serviceable condition, and shall be replaced when they become warped, scratched or pitted so as to impair the vision of the user.

(9) Employees whose vision requires the use of corrective lenses and who are required by this rule to wear protective goggles, shall be provided with goggles of one of the following types:

(a) Goggles whose lenses provide the proper optical correction and withstand the drop and penetration tests specified in this rule. Such lenses are exempted from the requirements for parallelism of surfaces.

(b) Goggles which can be worn over personal corrective lenses without disturbing the adjustment of the lenses.

(10) The employer is not required to bear the expense of obtaining the prescription for protective corrective lenses of goggles.

**History:** Cr. Register, February, 1962, No. 74, eff. 3-1-62.

**Ind 1.82 Personal ear protection.** For these requirements see Wis. Adm. Code, chapter Ind 11, Occupational Noise Exposure.

**History:** Cr. Register, February, 1962, No. 74, eff. 3-1-62; r. and recr., Register, July, 1971, No. 187, eff. 8-1-71.

**Ind 1.83 Gas welding and cutting.** (1) All cylinders for compressed gases shall be constructed, marked and maintained in a manner approved by the industrial commission.

*Note:* It will be the policy of the industrial commission to approve cylinders in accordance with interstate commerce commission specifications and regulations.

(2) Gas generators, regulators, consuming devices and other fittings for welding and cutting shall be of a type approved by the industrial commission.

*Note:* It will be the policy of the industrial commission in general to approve devices listed as standard by the Underwriters' Laboratories.

(3) Acetylene shall not be generated or utilized at a pressure in excess of 15 pounds per square inch gauge pressure. This requirement is not intended to apply to the storage of acetylene dissolved in suitable solvents in cylinders manufactured in accordance with the requirements of subsection Ind 1.83 (1). The use of liquid acetylene is prohibited.

(4) Gases shall not be transferred from one cylinder to another.

(5) Gas shall not be used from a cylinder except through an approved pressure reducing regulator.

(6) Cylinders not provided with hand wheel valves shall have spindle keys on valve spindles or stems while cylinders are in service. Empty cylinders shall be plainly marked EMPTY, or MT, and valves shall be closed.

(7) Storage and manifolding of fuel gases, oxygen and calcium carbide shall be in accordance with the following requirements:

(a) All gas cylinders shall be secured to prevent falling.