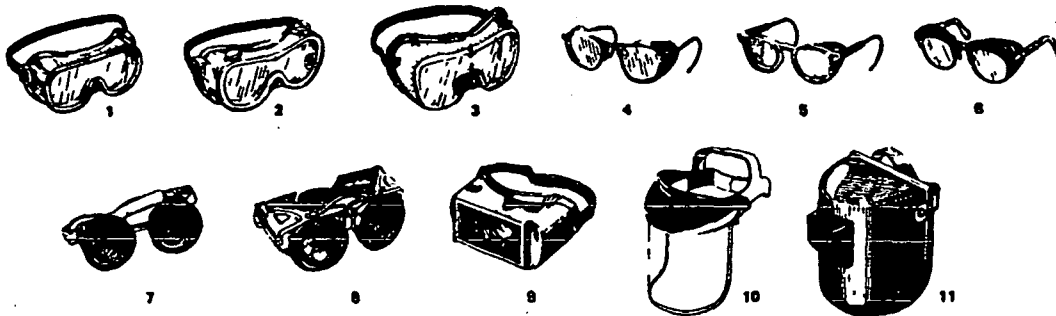


# Personal Protective Equipment

## SELECTION OF EYE AND FACE PROTECTIVE EQUIPMENT



- 1 GOGGLES, Flexible Fitting, Regular Ventilation  
 2 GOGGLES, Flexible Fitting, Hooded Ventilation  
 3 GOGGLES, Cushioned Fitting, Rigid Body  
 \*4 SPECTACLES, Metal Frame, with Sideshields  
 \*5 SPECTACLES, Plastic Frame, with Sideshields  
 \*6 SPECTACLES, Metal-Plastic Frame, with Sideshields

- \*\* 7 WELDING GOGGLES, Eyecup Type, Tinted Lenses (Illustrated)  
 7A. CHIPPING GOGGLES, Eyecup Type, Clear Safety Lenses (Not Illustrated)  
 8. WELDING GOGGLES, Coverspec Type Tinted Lenses (Illustrated)  
 8A. CHIPPING GOGGLES, Coverspec Type, Clear Safety Lenses (Not Illustrated)  
 \*\* 9. WELDING GOGGLES, Coverspec Type, Tinted Plate Lens  
 10 FACE SHIELD (Available with Plastic or Mesh Window)  
 \*\*11 WELDING HELMETS

\*Non-sideshield spectacles are available for limited hazard use requiring only frontal protection  
 \*\*See appendix chart "Selection of Shade Numbers for Welding Filters."

| APPLICATIONS                                                |                                                            |                                                                                      |
|-------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------|
| OPERATION                                                   | HAZARDS                                                    | RECOMMENDED PROTECTORS <small>Bold Type Numbers Signify Preferred Protection</small> |
| ACETYLENE—BURNING<br>ACETYLENE—CUTTING<br>ACETYLENE—WELDING | SPARKS, HARMFUL RAYS,<br>MOLTEN METAL,<br>FLYING PARTICLES | <b>7, 8, 9</b>                                                                       |
| CHEMICAL HANDLING                                           | SPLASH, ACID BURNS, FUMES                                  | <b>2, 10</b> (For severe exposure add 10 over 2)                                     |
| CHIPPING                                                    | FLYING PARTICLES                                           | <b>1, 3, 4, 5, 6, 7A, 8A</b>                                                         |
| ELECTRIC (ARC) WELDING                                      | SPARKS, INTENSE RAYS,<br>MOLTEN METAL                      | <b>9, 11</b> (11 in combination with 4, 5, 6, in tinted lenses, advisable)           |
| FURNACE OPERATIONS                                          | GLARE, HEAT, MOLTEN METAL                                  | <b>7, 8, 9</b> (For severe exposure add 10)                                          |
| GRINDING—LIGHT                                              | FLYING PARTICLES                                           | <b>1, 3, 4, 5, 6, 10</b>                                                             |
| GRINDING—HEAVY                                              | FLYING PARTICLES                                           | <b>1, 3, 7A, 8A</b> (For severe exposure add 10)                                     |
| LABORATORY                                                  | CHEMICAL SPLASH,<br>GLASS BREAKAGE                         | <b>2</b> (10 when in combination with 4, 5, 6)                                       |
| MACHINING                                                   | FLYING PARTICLES                                           | <b>1, 3, 4, 5, 6, 10</b>                                                             |
| MOLTEN METALS                                               | HEAT, GLARE, SPARKS, SPLASH                                | <b>7, 8</b> (10 in combination with 4, 5, 6, in tinted lenses)                       |
| SPOT WELDING                                                | FLYING PARTICLES, SPARKS                                   | <b>1, 3, 4, 5, 6, 10</b>                                                             |

FIG 38-11 — Selection of eye and face protective equipment Illustration and table are taken from American Standard Z87.1, *Practice for Occupational and Educational Eye and Face Protection*

Courtesy of the American Standards Institute