

### Exhibit 3: Eye and Face Protection Selection Chart

Sources/Activities	Hazards	Personal Protective Equipment
IMPACT - Chipping, grinding, machining, masonry work, woodworking, sawing, drilling, chiseling, powered fastening, riveting, and sanding	Flying fragments, objects, large chips, small particles, sand, dirt, etc.	Safety glasses with side protection at a minimum for large particles, goggles for grinding/sawing and fine particles and dust. <i>For severe exposure, use face shield in addition to safety glasses or goggles. See notes 1, 3, 5, 6, and 10.</i>
HEAT - Furnace operations, pouring, casting, hot dipping, and welding	Hot sparks	Face shield, goggles, safety glasses with side protection. For severe exposure use face shield. <i>See notes 1, 2, and 3.</i>
	Splash from molten metals	Face shield worn over goggles. <i>See notes 1, 2, and 3.</i>
	High temperature exposure	Screen face shield, reflective face shield. <i>See notes 1, 2, and 3.</i>
CHEMICALS - Acid and chemical handling, degreasing, plating, overhead painting operations	Splash	Goggles, eyecup and cover type. <i>For severe exposure, also use a face shield. See notes 3 and 11.</i>
	Irritating mists	Special purpose goggles
DUST - Woodworking, buffing, general dusty conditions	Nuisance dust	Goggles, eyecup and cover types. <i>See note 8.</i>
LIGHT and/or RADIATION		
Welding: Electric arc	Optical radiation	Welding helmets or welding shields. <i>See notes 9 and 12.</i>
Welding: Gas	Optical radiation	Welding goggles or welding face shield. <i>See note 9.</i>
Cutting, torch brazing, torch soldering	Optical radiation	Safety glasses or welding face shield. <i>See notes 3 and 9.</i>
Glare	Poor vision	Safety glasses with shaded or special purpose lenses, as suitable. <i>See notes 9 and 10.</i>

#### Notes for Eye and Face Protection Selection Chart:

1. Project Leaders/supervisors should recognize the possibility of multiple and simultaneous exposure to a variety of hazards and provide adequate protection against the highest level of each hazard. Protective devices do not provide unlimited protection.
2. Operations involving heat may also involve light radiation. As required by the OSHA PPE standard, provide protection from both hazards.
3. Face shields should only be worn over primary eye protection (safety glasses or goggles).

4. As required by OSHA, filter lenses must meet the requirements for shade designations in 29 CFR [1910.133\(a\)\(5\)](#). Tinted and shaded lenses are not filter lenses unless they are marked or identified as such.
5. As required by OSHA, people who have to wear prescription lenses must wear either protective devices fitted with prescription lenses or protective devices designed to be worn over regular prescription eyewear.
6. Wearers of contact lenses must also wear appropriate eye and face protection devices in a hazardous environment. Contact lens wearers should recognize that dusty and/or chemical environments may represent an additional hazard.
7. Employees using metal frame protective devices should be careful in electrical hazard areas.
8. Atmospheric conditions and restricted ventilation can cause lenses to fog. Frequent cleaning may be necessary.
9. Welding helmets or face shields should be used only over primary eye protection (safety glasses or goggles).
10. Non-side shield safety glasses only protect the front of the eye and are not acceptable eye protection for the sources and operations listed for "impact."
11. Ventilation should be adequate, but well protected from splash entry. Eye and face protection should be designed and used so that it provides both adequate ventilation and protects the wearer from splash entry.
12. Protection from light radiation is directly related to filter lens density. See note 4. Select the darkest shade that allows you to do the job task.

### Filter Lenses for Protection Against Radiant Energy

Operations	Electrode Size 1/32 inch (0.8mm)	Arc Current	Minimum Protective Shade
Shielded metal arc welding	Less than 3	Less than 60	7
	3-5	60-160	8
	5-8	160-250	10
	More than 8	250-550	11
Torch brazing	--	--	3
Torch soldering	--	--	2

**Note:** As a rule of thumb, start with a shade that is too dark to see the weld zone. Then go to a lighter shade that still allows you to view the weld zone without going below the minimum. In oxyfuel gas welding or cutting where the torch produces a high yellow light, it is best to use a filter lens that absorbs the yellow or sodium line in the visible light of the (spectrum) operation.

ANSI/ISEA Z87.1 is the standard used by OSHA to determine the minimum performance standards products must provide to be acceptable. Only purchase eye and face protection that meets this standard.