

# Aging

# EYES

## Safety bifocals among new eyewear models

By FRED RAVETTO

**C**hanging demographics of U.S. workers create a challenge to ensuring eye protection. Our diverse workforce is made up of men and women with faces in all shapes and sizes and all ages too. If we look only at the changing demographics, we find the number of workers in the 40-to-

64 age range has increased by more than 20 percent since 2000. We all know around age 40 the ability to focus on close objects lessens. With these obstacles, how can you reduce the risk of eye injuries?

### What is the weakest link?

Eye injuries don't know a worker's age, eyesight condition or facial shape. Every year 33,000 eye injuries take place in American workplaces, according to the National Safety Council's "Injury Facts," 2010 edition. The main causes? Not wearing eye protection or workers wearing poor-fitting eye protection.

Companies often discover too late the weak links that lead to eyes being unprotected. Safety professionals witness:

- ⊕ Workers exposed to flying debris as a result of poor facial fit, which creates gaps around the safety lens perimeter
- ⊕ Workers who wear prescription glasses or drugstore readers instead of wearing certified safety glasses
- ⊕ Workers who swap on and off safety glasses for drugstore readers, leaving their eyes exposed
- ⊕ Workers who wear non-impact-resistant prescription eyewear, leaving them at risk for shattered lenses

The list extends further, as does the continuation and frequency of eye injuries.

### Prevention requires proper fit

To start, workers should wear eye protection that meets the ANSI/ISEA Z87.1-2010 American National Standard for Occupational and Educational Personal Face and Eye Protection. Unfortunately, this standard does not regulate a proper fit. Wearing poorly fitted glasses is a major cause of eye injuries. A Bureau of Labor Statistics survey showed that 94 percent of the injuries to workers wearing eye protection resulted from objects or chemicals going around or under the eye protector. Wearing a proper fitting pair of safety glasses is critical to preventing eye injuries from occurring.

A proper fit provides wraparound protection on the sides, a close fit at the brow and cheeks to protect from flying objects and allows for some air circulation between the eye and the lens.

To fit a wide range of face shapes and sizes, start by selecting a frame that has full wraparound protection. This will protect from side entry of debris and should offer wide peripheral visibility. A nicely curved mono lens frame should also protect and minimize gaps at the eyebrow and at the cheek. Selecting a frame to accommodate larger lenses prevents frame obstruction and will provide a wide field of vision.

### Higher level of fit & coverage

A growing trend in the market is the use of foam-lined glasses in which the soft foam fills gaps and protects the eyes. The addition of the foam liner acts as a "gap filler" to fill gaps between the lens and face and keep out debris. Use caution when selecting this option to be sure the foam liner design does not create "tunnel vision" that will limit vision. This can result from excessive foam depth or poor frame

design. It is recommended to test product samples for clear field of vision as well as proper fit. When testing the product, check for anti-fog coating and indirect ventilation slots — this insures the close-fitting glasses won't fog. Note that closed cell foam is a preferred material for lining these glasses. It will maintain comfort while eliminating absorption of body oil and sweat.

### Bifocal safety solutions

Bifocal safety glasses are a rapidly growing market, addressing the need for both safety and reading glasses. This innovation was brought to market when bifocal safety glasses were introduced with polycarbonate safety lenses. Today, workers with presbyopia, the reduction of near vision such as reading, are now able to read and do their work in a safe and very cost-effective manner.

In a recent experience, I learned the need for bifocal safety glasses extends well beyond industrial markets. During a dentist office visit, the hygienist was wearing a pair of safety bifocal glasses. She raved how this innovation improved the quality of her work and reduced her eye strain.

### Wearing poorly fitted glasses is a major cause of eye injuries.

More and more companies are making safety bifocals available to their workforce at a fraction of the cost of prescription safety glasses. Models are available in a choice of bifocal powers (diopters): 1.00D, 1.50D, 2.00D, 2.50D and 3.00D. For outdoor workers, these glasses are available in tinted (sunglass) lenses.

### Over specs safety glasses

The days of oversized one-size-only over specs are over! New products have hit the market featuring contemporary designs that are more moderate in size. Workers can feel happy to wear these attractive new designs over their prescription glasses in clear lenses, or for outdoors in tinted lenses. The newer styles continue to maintain a flatter lens curvature to minimize reflection that tends to occur when dual spectacles are worn.

Innovations in safety glasses designs provide a higher level of protection for our diverse workforce. Today we have options that offer multifacial fit, reading ability and contemporary design over specs, all made of polycarbonate lenses to insure protection against impact and UV light exposure. **ISHN**

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