

Our Website is coming!

We are currently developing a website to provide our industrial customers and eyecare providers with up-to-date information on safety eyeglasses, standards and products. The site should be up and running by the end of this year. In the meantime, check out these safety and vision industry sites, links available through Titmus:
www.titmus.com

Statistics

National Safety Council Statistics
Department

Vision-related Sites

Eye Protection Council

Prevent Blindness America

Polycarbonate Council

National Eye Institute

American Academy of Ophthalmology

American Academy of Optometry

International Academy of Sports Vision

Pacific University

Optometry Today

School Health Corporation

Vision Council of America

Optical Laboratories Assoc.

Safety-related Sites

OSHA

American Society of Safety Engineers

ANSI Home Page

National Safety Council

MSDS Online - Source for Material

Safety Data Sheets American Society
for Testing and Materials

ISO: International Organization
for Standardization

ISEA: The Safety Equipment Assoc.
Safety Equipment Institute

National Fire Protection Assoc.

Test your knowledge...

Congratulations to **Chris Waring, Advanced Family Eyecare, Independence, Iowa**, for answering the following questions from our last issue correctly and winning the Bushnell® Binoculars.

1) Frame and lenses must be marked with "Z87." FALSE

ANSI Z87 standards require the frame and any frame components to be marked with Z87. Lenses are required to be marked with the lens manufacturer's logo in the outside temporal corner. This marking is to ensure that the lenses have been tested for impact by the manufacturing laboratory. Unmarked frames and lenses are not considered safety eyeglasses by ANSI Z87.1 Standards.

2) Safety frames do not need to be factory tested if they are properly inspected by the dispenser. FALSE

ANSI Z87 standards require the frames to be properly marked by the frame manufacturer as proof of testing prior to shipping to the distributors.

3) Glass lenses are less impact resistant when chipped or scratched. TRUE

4) Photochromic lenses can be used for welding applications. FALSE

Photochromic lenses cannot be used for welding applications because of special filtering requirements needed for welding. Welding applications require green glass lenses to be used in conjunction with a welding mask. (Please see Section 6.5.2 Photochromic Lenses in the ANSI Z87.1 Eye and Face Protection Standards for detailed requirements.)

5) Doctors or dispensers should never ask employees specific questions regarding what work the employee performs on the job. FALSE

Employees may have special job needs for computer work, overhead work, laser or welding, etc. that are very important when ordering and fitting their safety eyeglasses. While the employee should be responsible for conveying this information, it is always important to ask job-related questions that will affect the type of eyeglasses provided.

Answer the next set of questions correctly and your name will be entered into a drawing for a \$25 gift certificate to your favorite store or restaurant. Mail answers on your company letterhead to Essilor Laboratories of America, Industrial Eyewear, or fax to: **(800) 347-8695, before October 1st**. Please include your name, telephone number and shipping address.

- 1) All lens styles (single vision, bifocals, etc.) are available for safety eyeglasses.**
- 2) An employee working with electricity should always select a metal or wire safety frame.**
- 3) More eye injuries occur from frontal impact than impact from behind.**
- 4) All side shields come with top and side protection.**
- 5) ANSI standards state "Employees must be trained on the inspection and maintenance of safety eyeglasses."**

Essilor Laboratories of America's Industrial Eyewear Newsletter is designed to keep customers and eyecare providers well informed about new products, changes in ANSI Standards, and technical and legal developments in safety eyewear. We appreciate your business and invite you to direct comments, ideas and requests to Essilor Laboratories of America, Industrial Eyewear Newsletter, (800) 347-8695, Extension 253, or FAX your information to: (800) 347-8695, or e-mail to: wos@gbonline.com.
Essilor Laboratories of America
Industrial Eyewear
P.O. Box 10387
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Industrial Eyewear Newsletter

BARTLEY OPTICAL
BELL OPTICAL
DASH LAB
DBL LABS
DUFFENS OPTICAL
DUFFENS / LANGLEY OPTICAL
KOSH OPHTHALMIC, INC.
MILROY OPTICAL
NEW CITY OPTICAL
OPTI-CRAFT
OPTICAL SUPPLY, INC.
PRECISION OPTICS
SOUTHERN OPTICAL
THE NEW OMEGA-DALLAS
TWIN CITY OPTICAL
TOP NETWORK
WOS OPTICAL

From the Director

We've all been busy this year exhibiting at state and regional safety conferences. Each of our sales representatives attends and exhibits at four to six conferences each year in his or her territory. We share new frame and lens products, answer questions about safety eyewear options and explain the benefits of our program. While we still have many conferences to attend this year (see list on page 3), we are very excited about exhibiting at the **National Safety Council Congress and Expo 2000** at the Orange County Convention Center in Orlando, FL, October 16-18. The seminars extend through October 20th. If interested in attending the conference, you can register via the internet at <http://www.nsc.org> or by fax, mail or in person at the conference (**not by telephone**). You can also contact us and we will send you a copy of the registration form. After 9/8/00, registration must be done at the conference. Please stop by **Booth #1047** to say hello and register for door prizes. **We look forward to seeing you there!**

Joe Marcella
Director of Industrial Sales

Fall 2000
Volume 2

Preparing for ANSI Z87+

Titmus*

The requirements for the new ANSI Z87.1 standards are getting closer to resolution as the document goes out for public review. It is unlikely that additional changes will be considered, but it is important that all manufacturers of safety prescription eyeglasses understand the most significant differences contained in the proposed draft. The approved standard is not likely to be published until late this year.

The board writing the ANSI Standards for Protective Eyewear is reviewing the following proposed changes. **(The final copy may or may not be exactly as stated below.)**

Spectacle Frame Test

The test lenses for frames designed for non-plano (prescription) spectacles shall be 2.0mm with an allowable variance of +0.2mm-0.00. Previously, all prescription safety frames were tested with 3.0mm lenses.

Basic Impact and High Impact Lenses

There will be two (2) categories of lenses in the new standard, **Basic Impact** and **High Impact**. **Basic Impact lenses** shall not be less than 3.0mm thick at their thinnest point. *(No change from the current requirements.)* A glass lens might be considered a "basic impact lens." **High impact non-plano lenses** shall not be less than 2.0mm thick at their thinnest point. *(This is a change from the current standard.)* For example, lenses made from polycarbonate material might be considered as suitable for "high impact lenses." Note: Because of the thinner lens and consequently lighter safety eyeglasses, this new proposed standard should encourage increased compliance of employees wearing their protective eyewear.

Product Marking

Lens:

Z87 Complies with Basic Impact testing
Z87+ Complies with High Impact testing

Frame:

Z87 All frames must be in compliance with the current standard. (Frames should ideally be tested to ensure that their design can accommodate the new permitted 2.0mm lens. The consequence of not testing the frame to the new lens standard would be that the lens could dislodge upon impact and therefore cause injury to the patient, if the thinner lens is used in the frame.)

We will continue to keep you informed regarding the status of these important safety eyewear standards.

TD2® 2-sided scratch-resistant coating benefits industry

Did you know that more than 40% of lenses returned for scratches are for scratches on the back side of the lens? Under normal wear conditions, scratches occur on both sides of the lens ~ *some from everyday work conditions and others from abrasive cleaning processes that include shirt-tails and other non-recommended cleaning cloths!*

Essilor Laboratories of America's proprietary TD2® coating technology provides a durable and flexible scratch-resistant coating designed for consistency and effectiveness on both sides of the lens, no matter what material it protects or how it is cleaned. TD2® ultimately saves on the number of replacement lenses needed, increases the average life of eyeglasses, which in turn helps to lower industry costs.

*Titmus®

continued

Essilor Providers: Use the Essilor Hotline to update your listing

Do you have a change in personnel, new contact, address, phone or dispensing fee? Let us know.

The Essilor Industrial Eyewear Program is successful because of the participation of eyecare providers who have agreed to assist in fitting and dispensing safety eyeglasses for our program. Therefore, it is critical that the information we provide industries about your office is current. Please let us know if you have moved, changed your office hours or added additional locations. Also, let us know if you would like us to list each optometrist, optician and/or ophthalmologist associated with your office, in addition to the usual practice name.

If you would like to review your listing, please call (800) 346-1338, Ext. 253, and we'll fax or mail your listing to you. Clearly mark changes to the copy and return by fax to: (800) 347-8695.

Thank you for your participation in our program!

Safety Eyewear Kit Program

Essilor Laboratories has developed sample fitting kits designed for use as safety eyewear samples. The six available kits include ten different frames that range from very basic to Titanium. The frames are supplied by a variety of manufacturers through Essilor Laboratories.

Please note that we will accept your current inventory for credit or exchange against the purchase of a new kit. Frames must be in good condition and currently on the market. Call our hotline and ask your industrial sales representative for more details:

(800) 346-1338, Ext. 253

TD2® offers backside of the lens protection plus 1-year warranty

TD2® integrates glass-like silica particles into its polymer matrix that imparts a hardness and scratch-resistance that is superior to other scratch-resistant coatings. The polymer matrix provides flexibility required for expansion and contraction of plastic lenses.

More than 100 million lenses with TD2® technology have been dispensed world wide. Less than 1% have been returned for scratches.

TD2® applied to poly SV or poly progressive lenses provides the ultimate in eye protection. The standard lens material for plano protection, polycarbonate has long been recognized as the safest lens material, with the one drawback that it can be scratched too easily. With the introduction of TD2®, scratches are virtually eliminated. TD2® may also be applied to plastic, Transitions® and plastic polarized materials. (See the following article on caring for your polycarbonate safety lenses.)



TD2® offers superior scratch-resistance while delivering the ultimate in tintability and UV protection on plastic. Tints remain true for the life of the prescription because UV protection will not degrade over time. Most lenses with factory scratch coating can be tinted with UV protection applied. Unfortunately, to facilitate UV protection, the scratch coating must be porous. The more porous the coating, the less scratch-resistance. In a factory hardcoat application, dyes and UV protection only penetrate about 5 microns into the matrix of the material, which can cause the tint to fade over time.

TD2® begins with an uncoated lens and uses special deep penetrating dyes. The molecular structure of the dyes allows penetration of the substrate up to 70 microns and can take up to 4 hours for total absorption. This slow absorption method ensures that the tint will not degrade over time.

TD2® is warranted against scratches and is limited to one year maximum, excluding certain work environments and condition. TD2® is not recommended for every job description ~ i.e. hostile work environments such as mining, grinding or welding.

Industrial chemicals cause crazing on polycarbonate safety lenses

More and more customers are returning polycarbonate safety lenses exhibiting signs of "crazing" in the belief that these damaged lenses are defective. In many cases, the damage has been caused by the use of certain chemicals coming in contact with the polycarbonate lenses. Some scratch-resistant coatings help protect polycarbonate lenses, but because the edges are exposed, certain chemicals can attack the **uncoated edge** causing crazing and cracking of the lens or coating. Please take time to inform your patients and employees to always clean their safety eyeglasses with mild soap and water instead of cleaning products and solvents. Here is a list of common industrial chemicals* that attack uncoated polycarbonate:

Hydrocarbons: Benzene, Toluene, Xylene

Halogenated Hydrocarbons: Methylene Chloride, Chloroform, Carbon Tetrachloride, Triclean, Trichlor, Perchlor

Ketones: Acetone, Methy Ethyl Ketone

Esters: Ethyl Acetate, Methyl Methacrylate

Amines: Butylamine (*Butylamine will attack coated polycarbonate also*)

Commercial Materials that will attack uncoated polycarbonate include **gasoline**.

*Gentex®

Slim-Rims enter the marketplace

The first rimless prescription eyewear

Hudson Optical

Hudson Optical recently introduced **Slim-Rims**, the first rimless prescription safety eyewear, available in seven styles including popular oval and rectangular shapes. As with all Hudson eyewear, **Slim-Rims** meet ANSI Z.87 standards and are available with clear or smoke sideshields. Each **Slim-Rims** frame comes with sleek spring hinge temples and silicone nose pads. For the full line of Hudson safety eyewear, ask your Essilor representative for a complimentary Hudson safety catalog.

10 Ways to Prevent Eye Injuries at Work

**Prevent Blindness America*

Good vision is priceless! Luckily, 90 percent of all workplace eye injuries are preventable with the use of proper safety eyewear. Despite the good news, the Bureau of Labor Statistics reports that eye injuries in the workplace cost over \$467 million annually. Adding indirect costs such as legal fees, judgments, and training replacement workers, places the estimated total above \$934 million each year. Nearly one million Americans have already lost some degree of sight to an eye injury. With over 365,000 work-related eye injuries still occurring each year, Americans could use a few tips on how to prevent eye injuries in the workplace!

1. **ASSESS!** Conduct a thorough analysis of plant operations. Inspect work areas, access routes and equipment. Examine eye accident and injury reports. Identify operations and areas that present eye hazards.
2. **TEST!** Uncorrected vision problems contribute to accidents. Incorporate vision testing in your pre-placement and routine physical examinations of employees.
3. **PROTECT!** Select protective eyewear designed for a specific operation or hazard. Protective eyewear must meet the current standards referenced by the Occupational Safety and Health Act of 1970 and subsequent revisions.
4. **PARTICIPATE!** For maximum protection against eye injury, establish a 100 percent mandatory program that requires eye protection throughout all operations areas of your plant. Experience shows this kind of program prevents more injuries and is easier to enforce than one limited to certain departments, areas or jobs.
5. **FIT!** Workers cannot be expected to use their protective eyewear unless it fits properly and comfortably. To ensure the eyewear is satisfactory, have it fitted by an eyecare professional or someone trained to do this. Provide the means for maintenance and require each worker to be responsible for his or her own eyewear.
6. **PLAN FOR AN EMERGENCY!** Establish first-aid procedures for eye injuries. Make eyewash stations accessible, particularly where chemicals are used. Train employees in basic first aid and identify those with more advanced first-aid training.
7. **EDUCATE!** Conduct ongoing educational programs to establish, maintain and reinforce the need for protective eyewear. Add eye safety to your regular employee education/training programs and include it as a large part of new employee orientation.
8. **SUPPORT!** Management support is a key ingredient in successful eye safety programs. All management personnel should set an example by wearing protective eyewear whenever and wherever required.
9. **REVIEW!** Continually review and, when necessary, revise your accident prevention strategies. Aim for the elimination of all accidents and injuries.
10. **PUT IT IN WRITING!** When all elements of your safety program have been established, put them in writing. Display a copy of the policy in areas frequented by employees, and include a review of the policy in new employee orientation.

*Reprinted with permission from Prevent Blindness America®. Copyright 1998-2000

http://www.preventblindness.org/safety/prvnt_injuries.html

Did You Know...

While most industries do not allow eyeglass tints darker than a #1 shade (unless clear is required), some companies with employees who work outdoors allow darker sunglass tints. In the past polycarbonate lenses were not very tintable (no darker than a fashion tint) and the tint eventually faded or the color shifted. ELOA technology has improved tremendously in the last several years and we are now able to provide tints with up to 60% density on polycarbonate.

Special Note: Tinted lenses do not meet the standard requirements for welding, lasers, etc. Please contact your sales representative for the technical information and requirements.

TRADE SHOW AGENDA

SEPTEMBER 13-15

American Furniture Manufacturers Assoc.,
South Carolina

SEPTEMBER 19-21

Governor's Safety, Health & Environmental
Conference, West Virginia

SEPTEMBER 20

Dayton/Miami Valley Safety, Health &
Environmental Conference, Ohio

SEPTEMBER 20-21

Steele County Safety Council Safety &
Health Fair, Minnesota

SEPTEMBER 26

Northern Area Safety & Health Network
Conference, Minnesota

OCTOBER 2-4

Kansas Safety & Health Conference

OCTOBER 3-4

Georgia Department of Labor

OCTOBER 5-7

Tennessee Association of Occupational
Health Nurses

OCTOBER 10-13

North Carolina/South Carolina State
Assoc. of Occupational Health Nurses, Fall

OCTOBER 16-18

National Safety Council Congress & Expo

OCTOBER 25-27

Wisconsin State Association of
Occupational Health Nurses

OCTOBER 31-NOVEMBER 2

Great Lakes Industrial Show, Ohio

OCTOBER 31- NOVEMBER 3

Iowa Governor's Safety Conference
Tentative

Virginia Association of Occupational
Health Nurses

For more information regarding these
trade shows, please call our Hotline:
(800)-346-1338, Ext. 253