



HOYA's BlueControl reduce blue light and therefore reduce the amount of refocusing needed whilst improving contrast and wearer comfort.

Bathgate also points out that this light can lead to straining the eyes and sleeplessness as the natural sense of well-being is disrupted. "Solitaire® Protect Balance 2 makes a significant contribution to relaxed, healthy work at the PC, laptop or tablet and that way increases that general feeling of well-being and enhances a balanced biorhythm through relaxed sleep," she says.

Specialist Activities

Optimum has developed optiBlue, a specialist lens coating to reduce blue light. "Anti-reflection coatings have come a long way in terms of development over the past few years, from basic needs of easy to clean to specialist coatings aimed at specific activities. With most of us using some form of electronic device on a daily basis, blue light blockers are an example of developments that help reduce fatigue. I believe that the information that manufacturers like Optimum continue to supply to the industry is key to raise awareness of new technologies and with the Internet, the consumer can also be self-educated and aware of what they want from their spectacle lenses," says Mark Marland, Sales Director, Optimum Coatings.

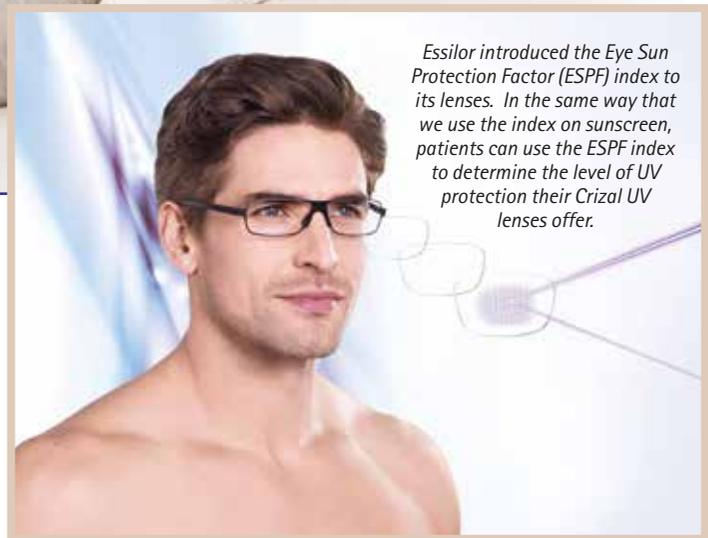
Limiting Risks

Zeiss is keen to target the long-term exposure to visible blue-violet light with a wavelength shorter than 460 nanometers, limiting the risk of macular degeneration over time, but also recognises that blue-violet light also has a positive effect on health. At wavelengths longer than 460 nanometers it plays an important role in regulating the melatonin levels, which influence the bodies circadian rhythms. Too much of this high-energy light makes the human body think it's daytime, which is why experts recommend switching off the computer well before bed.

There is therefore a requirement for 'intelligent' filters which reduce the levels of potentially harmful blue-violet light, without affecting the spectrum of light that is essential for good health. That is the goal behind speciality coatings such as the Zeiss DuraVision® BlueProtect, designed to help keep the eyes healthy over the long term. Peter Robertson, Marketing and Communications Director, Carl Zeiss Vision UK explains: "The new Zeiss DuraVision BlueProtect coating allows our customers to offer patients a coating solution for their lenses which is relevant to almost every spectacle wearer living and enjoying the benefits of an increasingly digitalised world but still aiming to protect their eyes from the bad effects digital devices might cause long term."

Better Handling

There have been big strides made in reducing smudging, smearing and dust attraction, though, as with all products, some perform better than others. However, John Quincey of Quincey Eyewear, does advise a certain amount of caution: "Some opticians see it as a useful way to increase revenue but knowing the patient and how they handle their spectacles is always important as poor handling can be an issue," he says.



Essilor introduced the Eye Sun Protection Factor (ESPF) index to its lenses. In the same way that we use the index on sunscreen, patients can use the ESPF index to determine the level of UV protection their Crizal UV lenses offer.

Help is at hand though; "The quality of anti reflection coatings has never been better with computer controlled coating processes, constant monitoring and quality checks delamination and coating failures are very much a problem of the past," says Sanders of Hoya.

All Round Coatings

Take Rodenstock's premium coating Solitaire® Protect Plus 2, which offers a super anti-reflection coating, dust, dirt and water repelling properties, climate resistance, anti-static properties, anti-fogging effect and UV protection against light that is incident from the front as well as the side. The new coatings were only launched following a study involving more than 3,100,000 wearing hours. Thanks to plasma-assisted high-tech coating technology, the scratch-resistance is twice as high and Rodenstock offers a three-year guarantee on its high-tech coatings.

Improving Understanding

And for consumers unsure about the value of these coatings, new demonstration tools help reveal the properties of these coatings before buying. Hoya has recently announced the launch of the Hoya Vision Simulator that offers wearers the ability to experience their new lenses before they buy them in store. Using a wearers' actual prescription, the Hoya Vision Simulator provides a highly accurate, 3D vision experience, visualising the optical effects of the various lens designs and treatments. "Hoya erases the line between virtual reality and individual reality, giving wearers the opportunity to choose the lenses and treatments that work best for them," says Sanders of Hoya Lens UK.

According to both Hepworth and Bathgate, anti-reflective lenses are no longer a niche product and are growing in popularity. Recent advances in technology have eliminated the traditional problems linked to AR. Consequently, the penetration of AR lenses is growing in the UK and Ireland and the proportion of AR lens orders coming into Essilor confirms this. Now is the time to discuss these coatings with patients. ◆