

Looking at lenses

ith so many avant garde fashion frames on show you could well be forgiven for thinking Silmo is all about outré and couture designs but lens technology was also very much in evidence.

Those attending the GfK presentation on the European big four (Germany, France, Italy, Spain) heard that on average ophthalmic lenses represented 60 per cent of an optician's revenues and this sector was delivering the strongest growth at 4 per cent. This was against a tough economic environment and falls in other sectors (news 04.10.13). Giampaolo Falconio, global eyewear manager, said some sectors of the fashion frame business were still growing but many were not. Lenses were seeing continued growth and he highlighted the value potential to opticians. Progressives lenses now shared the market 30/70 with single vision but were twice the price of their single-vision compatriots. 'Price is not a driver,' he said, highlighting the potential for higher value sales.

Perhaps the highest profile lens launch was Hoya's Hoyalux iD MyStyle V+ (news 04.10.13). It claims to have moved individualisation of progressives on to a new level with a system that considers the right and left Rx as individual components to produce a lens with reduced visual imbalance and greater comfort for the wearer.

Hoya said three-quarters of European presbyopes had a different correction in each eye. This sets up problems for progressives as the accommodation system acts upon both eyes to the same degree. On changing to near focus each eye would look through the lens at a different height, said Petri Eskola, products specialist.

Hoya has developed its Binocular Harmonization Technology, using each eye's Rx to ensure the appropriate correction at each point on the lens. It said this gave easy focusing, stability and excellent depth of vision. 'We are able to produce the lens in a way that no matter what the difference in Rx the wearer is always looking through the lens with an equal amount of addition,' said Eskola.

Currently, if a patient was unhappy with the near addition the optician might increase the corridor length or the add. This improved one eye but made it worse for the other, he said. Hoya uses its Binocular Eye Model to ensure each design is effective in minimising differences in the viewing height. 'Vertical difference can't be handled by the eye, horizontal can.'

Frame parameters are captured using

Lenses at Silmo 2013

Lenses are currently seen as the driver for growth in optical markets. **Chris Bennett** reports from Paris on the latest product launches



High profile launch: Hoya's Hoyalux iD MyStyle V+

Hoya's Visureal iPad tool, taking into account the way the patient wears the frames and fixates. A third, and new tool, the iDentifier records the wearer's lifestyle to optimise the design towards their behaviour and lifestyle.

Software for labs

Technology was also to the fore on the Indizen Optical Technologies stand. Julian Wiles represents Younger Optical in the UK and it is a major shareholder in IOT, a freeform software designer. Wiles said IOT offered labs the opportunity to produce the latest freeform designs without having to go to corporate lens suppliers. The designs offered by IOT competed with anything the corporates did, but IOT would offer labs the software for use on any suitable generator to work with a range of materials. He said the corporates didn't give their software out to independent labs so they had control over the materials and designs. The beauty for the lab is that they can offer the very latest in progressive designs without having to go to the corporates.' Around one million surfaces a month were produced using IOT software.

Wearing his Younger hat Wiles explained its Camber lens which uses the Tscherning ellipse principle – that every power has an ideal base curve. Its front surface base curve conforms to the curve on the 'elephant's trunk', changing the further down the lens you travel. This means software can be used more effectively for near zones at the bottom of each lens when the back side is surfaced. This provides wide reading zones, improved peripheral vision and a wider range of Rxs.

Winning trends

The Silmo d'Or product award is also an indicator of the latest lens trends. Among the finalists were Novacel with a lens that typifies those on show. Novacel is a French lens supplier, partially owned by Essilor, that doesn't operate in the UK and it was shortlisted for its SymbioZ progressive. This is an individualised lens which takes into account the patient's wearing habits, said export manager Emmanuel Visentin. 'We need your lifestyle and your morphology,' he said. It takes these measurements using the, now ubiquitous, iPad/frame jig combination as a dispensing and measurement tool.

Perhaps the smart money was on Essilor to win the Silmo d'Or with Crizal Prevencia. This is a lens which blocks harmful UV and blue light but lets through beneficial blue light. Essilor said this would help reduce the damage which causes cataracts and age-related macular degeneration.

This was made possible by the work carried out in a four-year research project with the Paris Vision Institute. This identified the portion of the visible light that poses a danger to target retinal cells. Blue light comes not only from the sun but also from artificial light sources such as computers and smartphones. This blue light has wavelengths between 380-500nm and some plays a beneficial role on health, in particular by regulating the internal biological clock. However, a specific band of this light might have a harmful effect on the eyes. The rays in the band 415 and 455nm are harmful and are filtered out.

The eventual winner of the Silmo d'Or in the lens category was BBGR's Intuitiv progressive. This is a lens which is adapted to suit the needs of left and right handed wearers explains Vanessa Koskas. She said handedness was not linked to eye dominance but vision was linked to posture. This meant that viewed objects appear nearer or closer depending on whether the viewer was right or left handed. Koskas said the design of Intuitiv was optimised for near and intermediate vision for people using smartphones and other devices. BBGR claims that the design offers a 35 per cent increase in the field of vision at near.