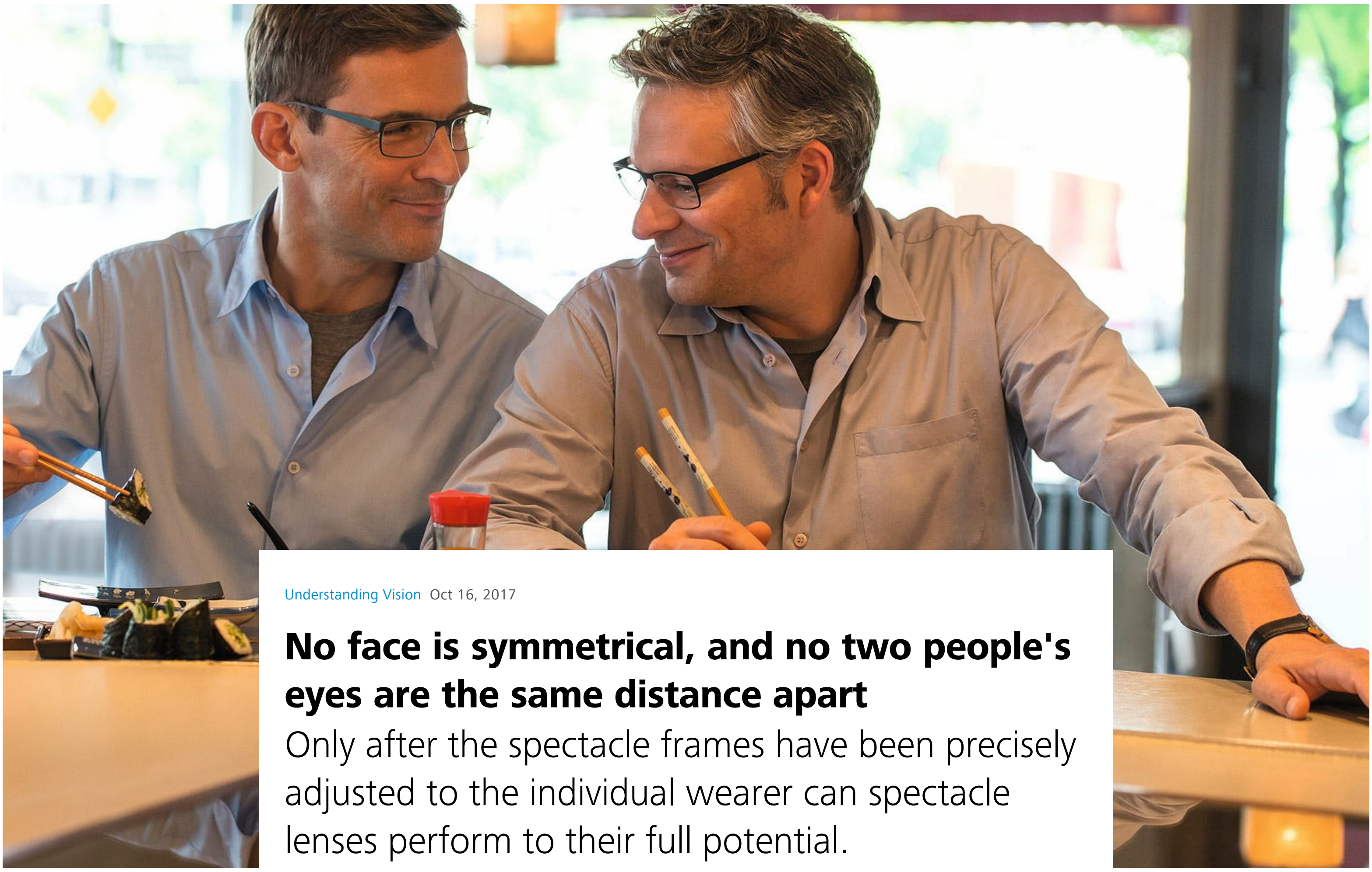


Understanding Vision Oct 16, 2017

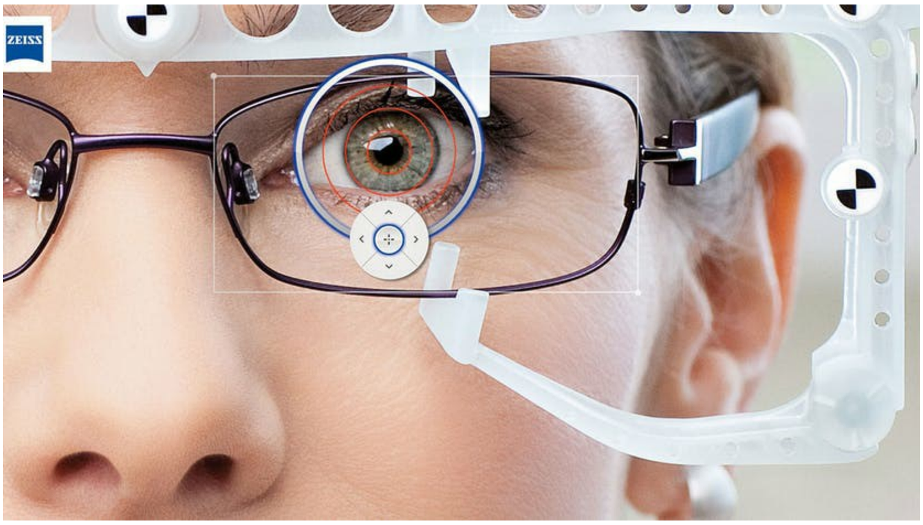
No face is symmetrical, and no two people's eyes are the same distance apart

Only after the spectacle frames have been precisely adjusted to the individual wearer can spectacle lenses perform to their full potential.

As children we discovered that the two sides of our faces are not same, i.e. they are not symmetrical. If you hold a mirror up vertically over the bridge of the nose, and look at a mirror image of each of the two sides of your face, you can see how your face would look if it were symmetrical and how strange that would look. This will also show you how differently we see with our right and left eyes through our spectacles. Because of that, when the optician adjusts spectacle lenses for their frames, it is very important for the optician to know how an individual wearer looks through his or her spectacles. Only this way can the spectacles be ground properly for the particular frames.

Only after the spectacle frames have been precisely adjusted to the individual wearer can spectacle lenses perform to their full potential.

Did you know that the even the best precision spectacle lenses cannot perform to their highest potential if the centration, i.e. the adjustment of the spectacle lenses to the particular spectacle frames, the distance between the eyes, the proportions of the face and even the posture, has not been measured properly? Up to 40% of valuable visual acuity can be lost this way. This is important for single vision lenses and especially important for the centration of › progressive lenses. For progressive lenses all three vision zones (distance, intermediate and near) have to be optimally adjusted. Ideally, with a normal posture, the spectacles wearer should be able to comfortably read while looking through the near zone, work at a computer through the intermediate zone and drive a car with the distance zone. The correct centration and, of course, the selected lens design plays a decisive role in determining the › spontaneous tolerability of progressive lenses. A difference of a millimetre can be crucial.



Analysis of right eye

In the past, opticians did the measurements for the centration of spectacle lenses manually. The spectacles wearer looked through the selected spectacle frames and the optician used a felt pen on the spectacle lens to mark where the pupils were and the distance between the eyes.

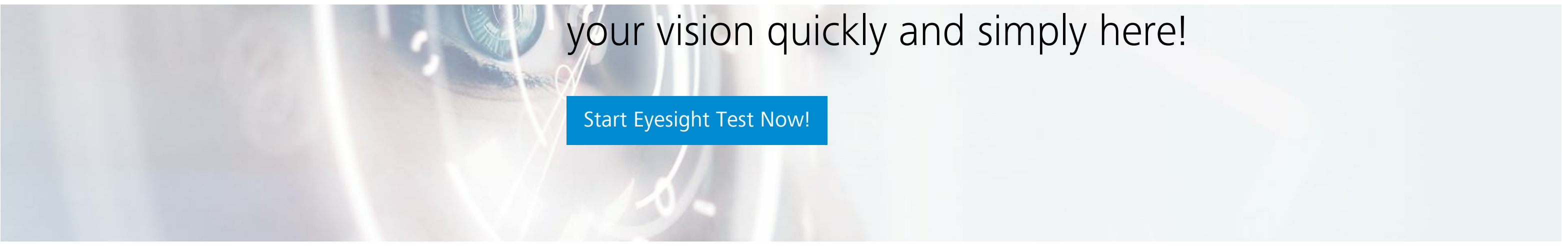
Today, opticians can work much more precisely – to a precision of a tenth of a millimetre. The i.Terminal®2 from ZEISS provides an objective image of the spectacles wearer with the frames. With the selected frames, the consumer stands in front of the centration device and centration is done with a high-quality photo, simply, quickly and extremely precisely. The benefit of this is that the adjustment procedure is more pleasant for the spectacles wearer, since the optician does not have to enter the customer's personal space to do the measurement. The spectacles wearer should stand as relaxed as possible, and look through the spectacles exactly as he or she would do in everyday life. The more precisely your optician knows how you look through your new spectacles, the better he or she is able to adjust the spectacle lenses. The i.Terminal®2 works with a high-tech camera and intelligent ZEISS software that with one click measures the centration data, saves it and makes the calculations for the production of the spectacle lenses.

Our tip:

if after the initial phase of getting accustomed to your new spectacles, you do not feel comfortable with them, it is possible that the centration has not been properly adjusted for you. Please speak with your optician about this.

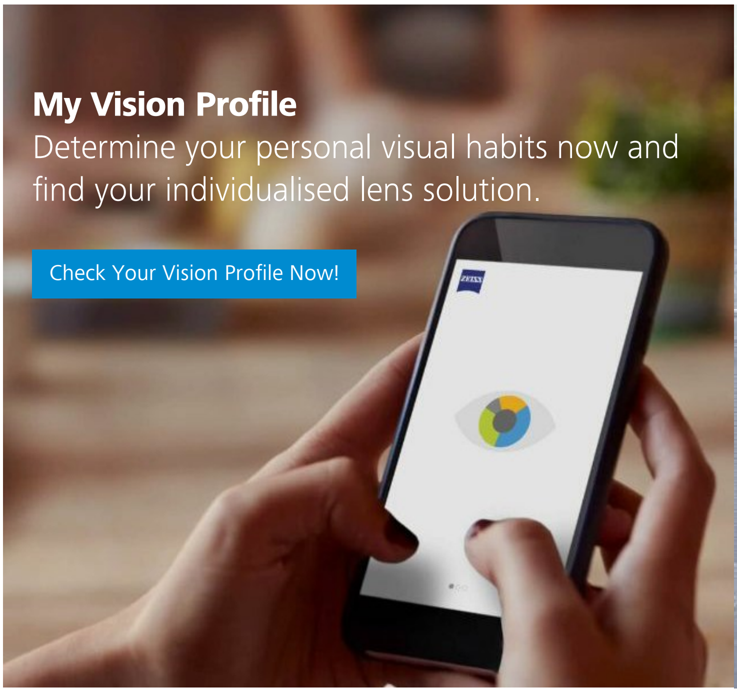
The ZEISS Online Vision Check

How well do you see contrast and color? Check



your vision quickly and simply here!

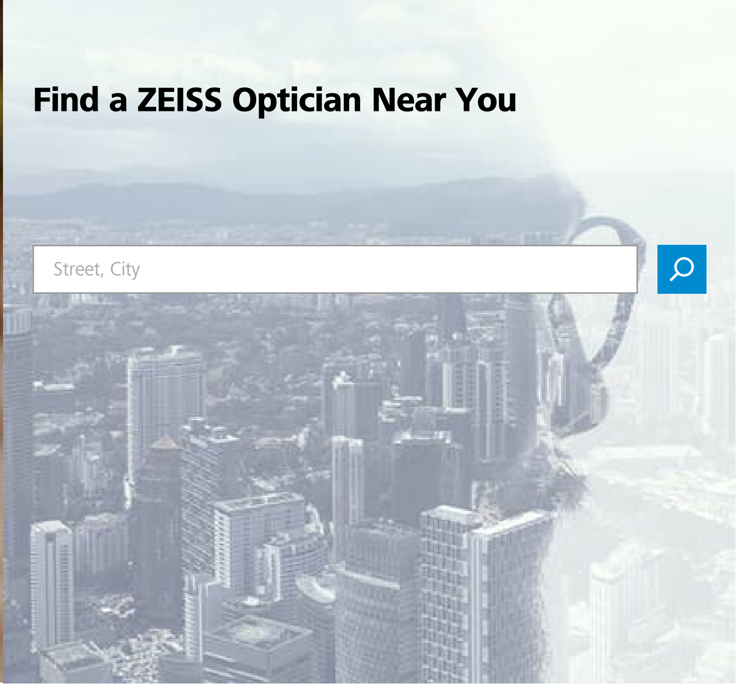
Start Eyesight Test Now!



My Vision Profile

Determine your personal visual habits now and find your individualised lens solution.

Check Your Vision Profile Now!



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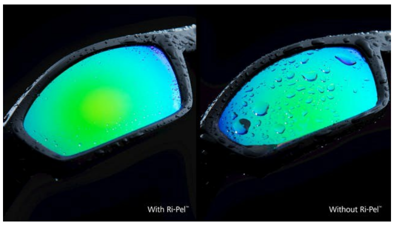

ZEISS Repellent Sun Coatings

Keeping your vision neat and clean

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