

Work Life 16-Oct-2017

Varifocal glasses with a difference

Is there a perfect pair of varifocal glasses for every occasion: for your job? For your favourite hobby or sport?

> **Varifocals are optical superstars: they offer near vision, distance vision and clear vision in the intermediate zone in just a single lens – and all without any perceptible transition. Many spectacle wearers aren't aware how precisely varifocal glasses can be customised to meet their particular needs. We've compiled a few special varifocal lens solutions for you which have almost become standard at ZEISS and at your ZEISS optician. Maybe you'll find your own personal vision solution amongst them. The good news: there's a solution for everything. Don't be shy: ask your optician.**

A reader wrote to us at BETTER VISION to inquire if you can switch around the individual vision zones on a pair of varifocal glasses. This particular spectacle wearer does a lot of overhead work and thus requires optimal near vision through the upper section of the lens, along with good intermediate distance vision through the lower section of the lens.

Producing this sort of varifocal glasses is particularly challenging because the spectacle lens design is normally the exact opposite of what this wearer requires. Nevertheless, it is possible to change the vision zones on the lens! This is especially demanding work for the optician: all measurement data, the centration and the calculation of the cylinder axes sent to the Production Department at ZEISS must be exact. Using this information, special varifocals can be manufactured using [freeform technology](#).

Varifocal glasses for driving





Here's another interesting case: a varifocal eyeglass wearer who drives a lot found that his varifocal glasses simply didn't work quite right. In spite of multiple fittings, he was still unhappy with his vision when driving. A ZEISS optician wanted to know why and decided to go for a drive with his patient. The cause of the problem was clear immediately. This varifocal eyeglass wearer had reclined his seat so far back that he was almost lying down – thus with this 'normal' varifocal lens design he had to look through the near vision or intermediate zones to see into the distance. He was only able to look through the distance range of the lenses by tilting his head in an extremely uncomfortable position. The optician was able to optimise this patient's varifocal glasses to accommodate his seated position when driving, providing the patient with comfortable vision.

Lorry drivers who wear varifocals spend their entire workday on the road and look through their glasses differently than someone driving a car. Lorry drivers bend their head slightly forward when looking at the road ahead because of the elevated sitting position, i.e. they are looking through the area on the varifocal lens where you typically find the intermediate zone. Thus it is especially helpful to optimise the lens design accordingly.

Did you know that there are ZEISS lenses which have been specially optimised for driving? You can wear DriveSafe lenses for the entire day. They feature a unique design and a special coating which demonstrate their strengths when you're driving: [> learn more about DriveSafe here.](#)

Varifocal glasses at work



Varifocals for [> pilots](#) pose another particular challenge because pilots do not just look down at the instruments on the dashboard like someone driving a car. Depending on the type of airplane, pilots also need to look overhead at their instruments. Ideally they would have a second near zone / intermediate zone in the upper section of the lens.

Many jobs place unique demands on a person's vision, and varifocals must rise to these challenges. For comfortable vision, writers or graphic artists require a different design in the near zone than

teachers, who often switch their gaze between the near zone and a particular intermediate distance in the classroom, or policemen who require good long-range vision as well as a clear mid distance zone for their daily work.

However, it's all about the fine details if you're a [dentist or jeweller](#). Here a magnifying attachment for your glasses can help.

Many people require improved vision for looking at things up close rather than in the distance. But it's inconvenient for them to continually put on and take off their reading glasses. For these people, the ideal solution is varifocal glasses with prescription powers for only near and middle distance vision and none for distance.

Varifocal glasses for sports



There are also special varifocals for competitive sports. Optician who specialise in sports eyewear can recreate the conditions experienced by the wearer for the particular sport in a separate refraction room, measure the patient's particular viewing distances and thus incorporate the required vision zones. For example: a racing cyclist leans forward and looks through the varifocal lens completely differently than a long-distance runner, marksman, [hunter](#) or [golfer](#).

Varifocal glasses today

Almost all varifocal spectacle wearers' vision has changed because they use digital devices, in particular smartphones. Different forms of media place different demands on your eyes: the reading distance when you use a smartphone is different than when you read a printed document or newspaper. All ZEISS varifocal lenses accommodate these different distances thanks to [Digital Inside® Technology](#).

The habits you have already acquired when wearing varifocal glasses play a key role. Lowering your eyes so that you have clear vision when looking through the near viewing zone of your varifocal lenses is firmly anchored in your brain. That's why a new pair of frames can mean an unpleasant change. However, with [Adaptation Control and FrameFit®+ from ZEISS](#) there is no need for you to change your visual habits with your new frames. Nevertheless: make sure you choose frames that are big enough for your varifocal lenses if you want comfortable vision.

What are the key points to remember when buying varifocal glasses?





- ✓ It is crucial that you discuss your medical history with your optician when purchasing varifocals. The better your optician knows what visual conditions are important or particular to your day-to-day life, the better they can advise you and configure your varifocal glasses.
- ✓ Consulting with your optician is important because everything may be possible but not with every pair of glasses. As a wearer, you need to know what the particular type of spectacle lens or lens design will offer you. You may be living with a compromise solution or want an additional pair of glasses for particular situations, such as > [computer glasses](#) or > [sports eyewear](#).
- ✓ Your optician has taken your history and has tested your eyes. Many people think that at this point everything else will go smoothly. Yet it is the > [perfect centration](#) – i.e. knowing how exactly your lenses fit into the spectacle frames and where you look through them – that transforms a pair of varifocal glasses into a masterpiece. Don't leave anything to chance! Up to 40% of a your visual performance can be lost because of improper centration.
- ✓ After purchase: once you have started wearing your new glasses, it may take a few days until you've got used to your new varifocal glasses. If you are still having difficulties with your new glasses, contact your optician and describe your problems. They'll be able to help you.

My Vision Profile

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

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ZEISS redefines progressive lenses!

The demands being made on our vision have increased phenomenally in recent years. BETTER VISION talks to Laura Rocha about how the new ZEISS Progressive Portfolio takes these challenges into account.

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