
The iris allows more or less light to pass through the rearsight, while filters work more or less like sieves. Because of their colour, they cut out light from a particular part of the spectrum, in other words light rays of exactly specified wavelengths. For example, as a result of using one or another filter, a picture can be tinted yellow, green, red and so on. This has several consequences:

1. Every filter reduces the amount of light passing through and so makes the sight-picture darker. Filters are therefore only recommended for use when the picture is bright enough.
2. Filters take certain colours out of the picture and thereby enhance others. This may - depending on the colour of the light - lead to changes in the contours, and often to an increased contrast.
3. The resulting tint generally has a subjective emotional effect on the subject. Green, we are told, is calming, whereas red excites.
4. Objective evidence proves that under certain conditions, filters lead to a better perception of the target.

In practice, filters are used in up to three positions, namely on the shooting glasses, in the iris or in the foresight element. Each of these locations has ist pros and cons. For speed and precision of changeover, the iris is the best. centra combines up to ten colours in a single iris unit; in addition, a polarising filter can also be integrated.

To decide what to use, the shooter should firstly look at the target without using any filter. If the picture is unsatisfactory ('too bright!') then firstly a *grey*, secondly *coloured* filters should be tested. In extremely bright conditions, the '*Polarisation filter*' is a further choice. The use of filters demands concentration when experimenting, and experience.

Exchangeable filters have to be of unquestionable quality. Only pure and perfectly ground glass allows light to pass through without being noticeably refracted. This guarantees a clear view and avoids shifting of the group centre after a changeover.

Keeping the filters clean is the responsibility of the shooter. Dust, moisture and changes in temperature are to be avoided, since they can lead to the glass fogging over. A set of filters should be thoroughly cleaned once a year.

Purists prefer fixed filters, mounted either on or in their shooting glasses, clipped to the iris or at the foresight. They can be kept reliably clean, but take up more time to change and are therefore only to be recommended when the light is not likely to change.

Filters gain importance as the shooter gets older. Some can manage to suddenly see better when they use a particular colour. This is a case for experimentation, as a clear view of the target is always an advantage.

We offer filters for the various locations in the sight system, that is for the glasses, the iris and the foresight tunnel. All of our solutions have been painstakingly manufactured and finished, The tints and colour combinations are the result of decades of experience. Naturally, our products are under guarantee. If needed, we can assemble colour combinations to suit individual preferences.

*Aiming is a process in which black and white dominate, although in shadowy areas the picture is enriched by tones of grey.*
*Colours only enter the picture if the shooter consciously wants to make use of them, either on the glasses, the iris or the foresight tunnel.*


*This seems to make sense, because coloured filters can improve the contrast. Just as one can see better under certain cloud coverings or in the evening light because of shifts in the spectral zone, using filters can intensify and sharpen the sight-picture.*
*Our tinted glasses and iris filters are a systematic means of achieving this effect.*
*In addition, grey inserts and polarisation filters, which reduce the light and cut out reflections, are also available.*

*Centra has experimented and researched for half a century in the area of light regulation. The results are seen in fine mechanic and optical instrumentation which has still to find a peer.*
*The elite circle of our clients and the large number of successes in national and international competition speak for themselves.*

*An iris-filter combination with 5 colours is recommended for air rifle shooting. This equips you for all eventualities and you also learn how and when to use different tints.*
*After clicking in or changing over a filter, the iris aperture and foresight diameter must be reappraised. The rule of thumb is the expectation that iris and foresight apertures will need to be increased if a darker filter is being used.*
*Make use of every opportunity to look at the sight-pictures of other shooters. You will often chance upon a set-up that is really good.*
*The ideal time to select the set-up for your sights is before the sighting period begins. Sit comfortably on the firing line, rest the rifle on a kneeling roll and adjust iris, filter and foresight proportions until the picture looks right. Then once you begin sighting-in, only the finest variations will be necessary...*