

Non-Polarizing Edge Filter

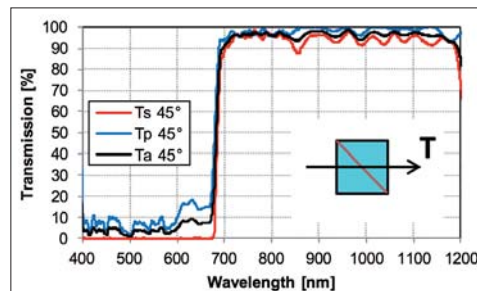
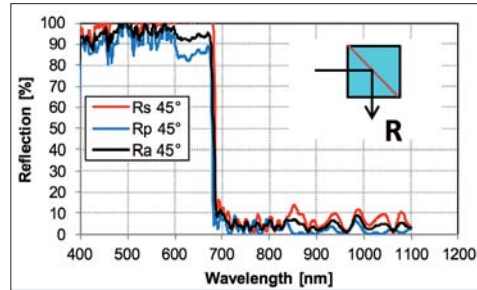
Enabling: polarization control using adapted refractive indices

For a beam path at oblique incidence the polarisation splits up – especially in cemented systems. Although very often this polarisation splitting is not allowed it is almost impossible to avoid it using classical coating designs. In consequence many customer specifications cannot be realized.

The Carl Zeiss Jena GmbH developed a new design algorithm to realize gradient-index and quasigradient-index coating designs to overcome the restrictions of classical coatings. In combination with the magnetron sputtering technology new polarization control opportunities are available.

Beyond that the high deposition energy yields very dense, compact and therefore environmental stable coatings with excellent optical quality, low scattering and very smooth interfaces.

The non-polarizing edge filter shown here is just one example for the nearly endless new opportunities enabled by this technology. Specific solutions are offered on customer request.



Technical data

Difference in edge position of s-pol and p-pol direction	$\Delta\lambda/\lambda < 1\%$
400 nm - 675 nm	R > 90%
685 nm - 1200 nm	T > 90%

Headlines

Non-Polarizing Edge Filter
Polarization Control
Adapted Refractive Indices

Coating Technology

Magnetron Sputtering
In-Situ Optical Monitoring
Gradient – index coating designs

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We make it visible.