Close-Tolerance Beam Splitter Specification: R and T = 50 % \pm 0,5 % only

Sensor stabilised magnetron sputtering technology combined with an additional plasma source and in-situ optical monitoring yields in coating processes which are suitable and necessary for extreme precise optical components.

The Carl Zeiss Jena GmbH installed this kind of cutting edge coating technology to realize highly sophisticated customer specifications.

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

In the example below a broadband non-absorbing 50% R / 50% T beam splitter is presented with absolute tolerances of \pm 0.5% both in the spectral range of 450 nm – 650 nm (VIS) or in the range of 600 nm – 1200 nm.

In this special Edition the beam splitter is performed for a parallel polarised beam and an angle of incidence $AOI = 10^{\circ}$.





Technical data

Transmission	50% +/- 0.5%
Reflexion	50% +/- 0.5%
Absorption	< 0.1%
Wavelength	450 nm - 650 nm (VIS)
	600 nm - 1200 nm (NIR)
Polarisation	s-pol, p-pol or non-pol
AOI	any

Headlines

Beam Splitter High Precision

Coating Technology

Magnetron Sputtering In-Situ Optical Monitoring

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