



- 1 Layer thickness distribution over carrier.
- 2 Coating system PRECICOAT – magnetron sputtering for precision optics.
- 3 Structurable coating on glass: chromium with reduced reflection.

PRECICOAT: MAGNETRON SPUTTERING FOR PRECISION OPTICS

What is PRECICOAT?

Dense optical coatings can be deposited homogeneously and reproducibly onto large optical components by magnetron sputtering. In the coating system PRECICOAT this technique is applied to meet the increasing quality and homogeneity requirements for the coating of large optical components.

Technical Data

The coating system is designed for the homogeneous coating of an area of 500 x 500 mm². It is equipped with 8 sputtering cathodes distributed over two vacuum chambers. In the first chamber four cathodes are available mainly for the deposition of metal layers by (pulsed) DC-sputtering. In chamber II four cathodes are operated pairwise as

dual-magnetrons. Here, dielectric films are deposited by reactive MF-sputtering. Additionally a linear Ion source is available and can be applied for surface conditioning.

Applications

Due to the separation between its two coating chambers PRECICOAT is predestinated for the deposition of metal-dielectric coatings. Metals are deposited at low residual gas pressures in one chamber, the dielectric layers are deposited reactively in the second chamber. Further special applications are protected metal mirrors e.g. for space and astronomy applications and structurable metal coatings for microoptics. In addition the entire spectrum of dielectric optical coatings can be deposited.

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