

Taurion 800 / 1100

Application

New challenges in optics and ophthalmics request steady development of the coating techniques and the related systems and accessories. Today state-of-the-art processes include standard PVD (cold or hot), Ion plating, Ion assisted deposition or PVD with APS. Stable, i.e. shift-free layers are generally the consequence of using sophisticated procedures such as IP, IAD and/or APS.

Plasma enhanced PVD is a further member in the PVD process family used in optics and ophthalmics. The RF excited plasma source can be operated with pure oxygen and/or argon and is much lower in its operating costs than other comparable technologies.

Design

TAURION 800 /1100 is a fully automatic, cubic, RF-plasma enhanced evaporation batch coating system with a calotte diameter of 800/1100 mm for RFPE-PVD processes.

The high vacuum evaporation system includes a filament free and low maintenance RF plasma source with 122 mm and 265 mm exit diameter.

The basic TAURION 800/1100 system consists of a water heated/cooled chamber and door including rotary drive, water battery on frame and power rack. The fully automatic PC control ensures an operator friendly handling. The system can be equipped with either cryo or oil diffusion high vacuum pump and a standard or dry forevacuum pump set including vacuum pressure monitoring.

Accessories

- Substrate holder 800/1100 mm of diameter
- Calotte and/or quartz radiant substrate heaters
- Resistively heated and/or e-beam evaporation devices, incl. pneumatic shutters
- Evaporation rate and layer thickness monitor
- Optical monitor on request

Typical Applications

ITO-Indium Tin Oxide – Semiconductor Application

Transmission of a non tempered ITO Layer made on a Taurion with RF-Plasma