OPTICOAT SERIES

Coating systems for ophthalmic lenses

HHV Ltd

Thin film deposition tools
for science and industry



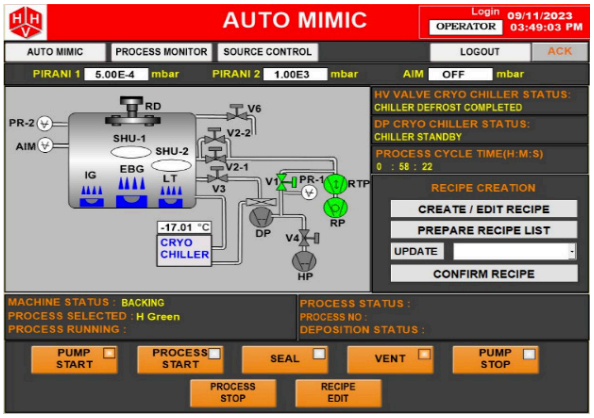
HHV Advanced Technologies is India's premier thin film and optics technology company with over 60 years of expertise in the design and manufacture of high vacuum equipment for research and industrial applications. The Opticoat series of coaters are designed for small (Opticoat 600), mid-size (Opticoat 1100) and large-capacity (Opticoat 1400) solution for Rx lens coating for high quality anti-reflection coatings by electron beam evaporation technology on lacquered CR 39 and polycarbonate lenses. These systems are ideal for production volumes, and highly reliable production operations. The coater is delivered with pre-programmed recipes and a user-friendly touch screen interface. What sets our system apart is its reliability combined with cutting edge process technology.

CHAMBER CONFIGURATIONS



CONTROL OPTIONS





FEATURES

- Repeatable and high-quality coatings
- Easy to use touch screen operation with recipe programming for automatic deposition
- Perfect for small, mid-sized and large capacity Rx-labs
- Segmented dome configuration for easy loading and unloading of lenses
- Remote accessibility for software maintenance and up-gradation
- Easy access vacuum pumping station

SPECIFICATIONS

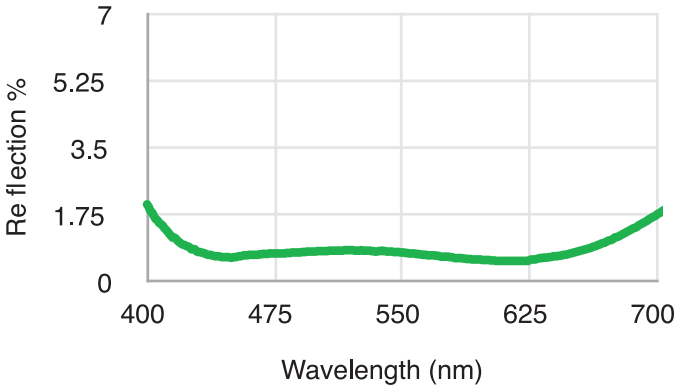
FEATURES	Opticoat 600	Opticoat 1100	Opticoat 1400
Chamber dimension (w x d x h) in mm	600 x 600 x 800	1100 x 1100 x 1100	1400 x 1400 x 1400
Electron beam gun (number of pockets)	6 x 7 cc	6 x 15 cc	8 x 15 cc
Ion Source (W)	850	1700	1700
Segment capacity Ø 70 mm (lenses)	42 (21 pairs)	144 (72 pairs)	216 (108 pairs)
Dome/segment number of sectors	3	4	6
Process time [both sides coated] (minutes)	60	60	60
High-vacuum pump system (capacity (l/s))	2000 (DP)	6500 (DP)	12000 (DP)
Booster pump (capacity m^3/h)	500	1000	1200
Rotary pump system (capacity m^3/h)	60	80	275
Cryogenic pump with meissner trap (l/s)	65000 l/s	135000 l/s	135000 l/s
Ultimate vacuum (mbar)	$\leq 2 \times 10^{-6}$	$\leq 2 \times 10^{-6}$	$\leq 2 \times 10^{-6}$
Quartz crystal monitoring	Single	Dual	Dual
Remote Diagnostic	Yes	Yes	Yes
Dimensions (w x d x h) in mm	3446 x 1690 x 1735	5000 x 2400 x 2400	5400 x 2800 x 2600

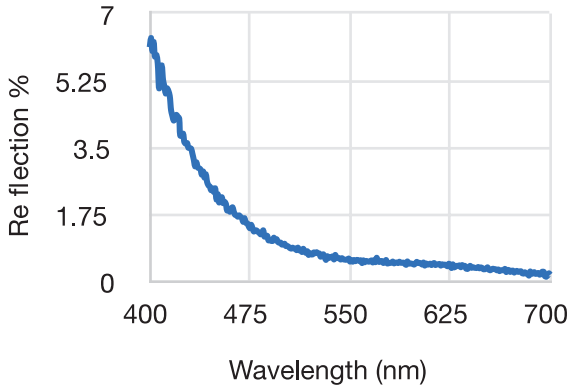






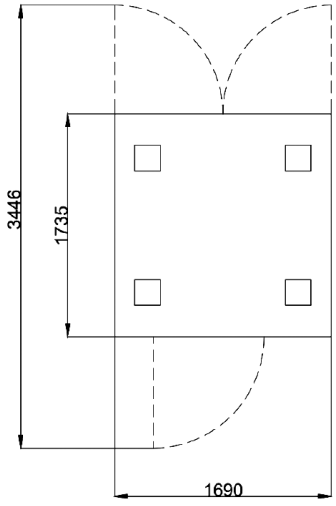
RESULTS

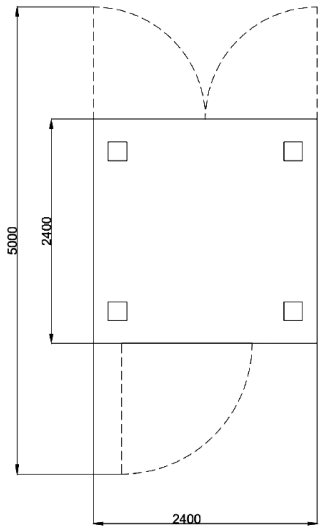


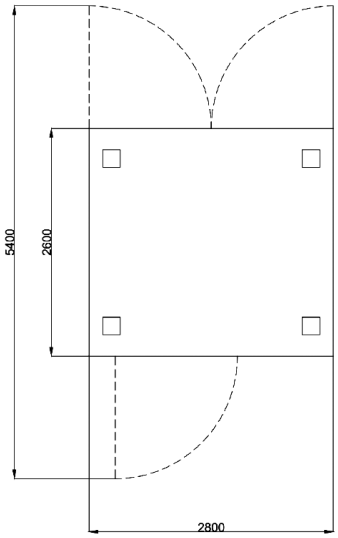


Processes	Reflectance	Layers per side
AR Green	0.6	5
AR Blue	1.0	5
Antistatic	-	1
Hydrophobic	-	1

SYSTEMS LAYOUT







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