



# AR AND MIRROR COATING

CUTTING-EDGE VACUUM TECHNOLOGY

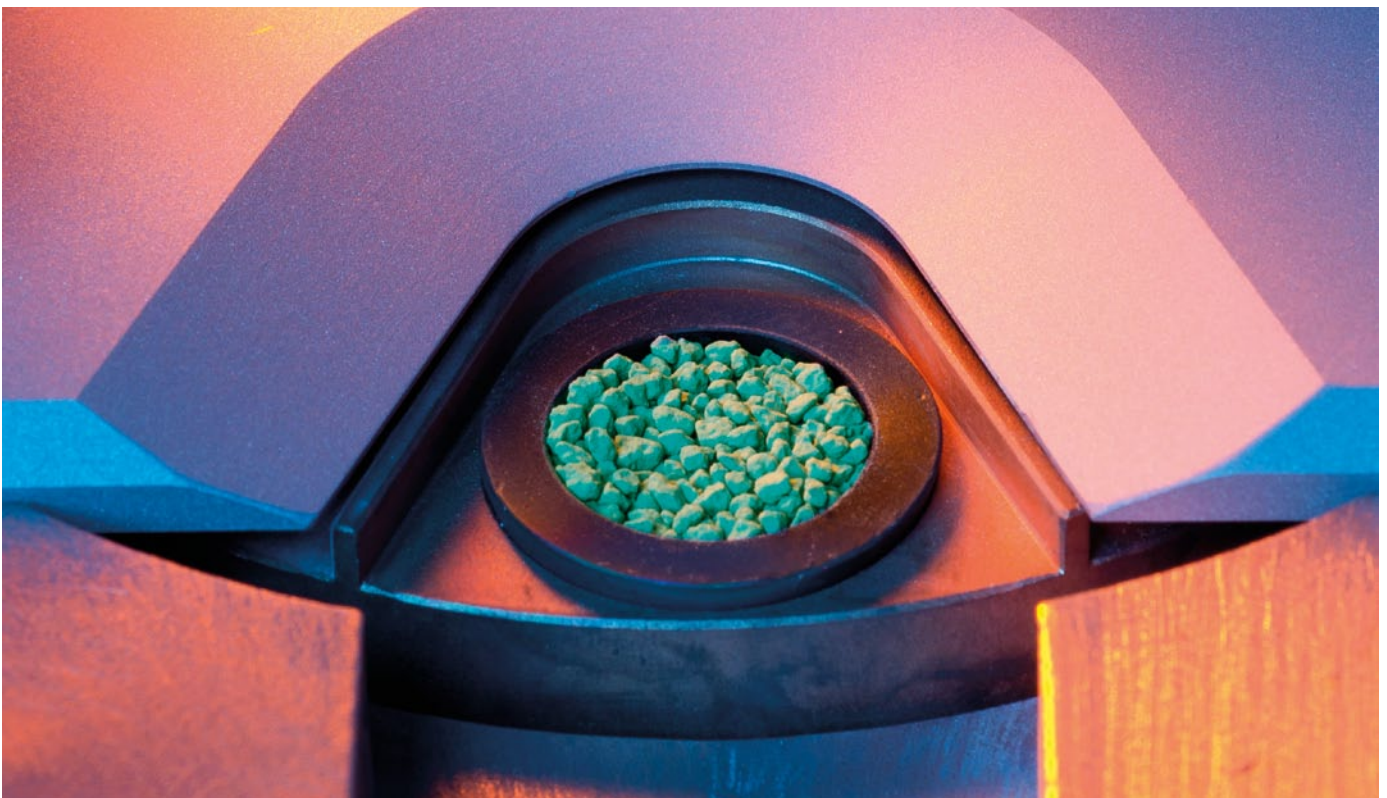
## AR AND MIRROR COATING

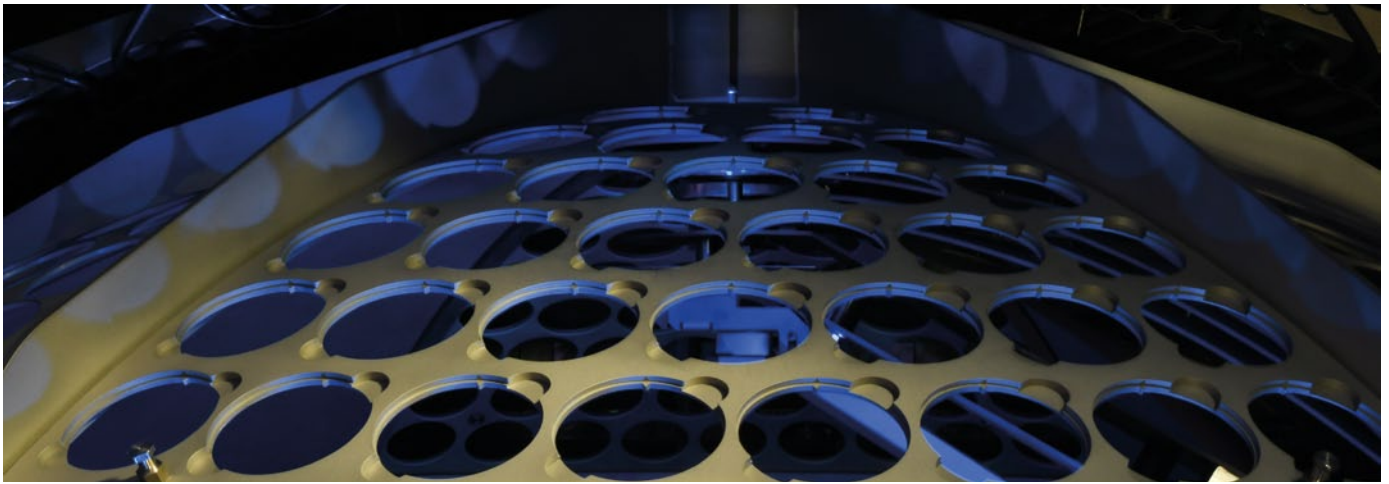
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Satisloh is the leader in anti-reflective (AR) and mirror coating equipment. The company's experience is based on developing and building sophisticated coating systems for over 50 years. Innovation, the broadest portfolio of equipment and processes, and a responsive and large service team that keeps Satisloh machines running help customers win against their competition.

Covering the full process chain, Satisloh offers a wide range of proven and easy to install AR, mirror and top-coat processes as well as matching coating consumables, for all lens materials and coating quality requirements.

With increased sophistication and controllability of vacuum chambers, new and unique coating designs with specific hardness, residual reflection, transmission and other performance attributes have been developed. No matter which process, Satisloh's expansive knowledge regarding equipment, processes and consumables guarantees uniform coating quality within each batch and from batch to batch.





## 1500-X

### Features + Benefits:

The 1500-X is Satisloh's high throughput vacuum box coater for clear AR and sun lenses. It is the ideal system for large Rx labs and mass-manufacturing facilities that want to maximize their productivity with reliable and consistent coating.

- High capacity: up to 305 lenses/batch 70 mm diameter with ringless full dome.
- Unprecedented throughput for multiple processes. The flexible system deposits anti-reflective (AR) and / or mirror coatings on organic and mineral lenses via thermal evaporation process (PVD).
- Big Meissner trap with large surface area reduces pump times at the start of the deposition process. This increases throughput and stabilizes process conditions with excellent repeatable results.
- Powerful and fast diffusion pump system
- Energy saving kit available.
- User-friendly and intelligent HMI software allows operators to quickly input data, set up procedures and change between process parameters.
- E-beam gun provides high flexibility when selecting and changing coating processes (eg: mirrors, AR, colors)
- Simplified E-beam gun features E-beam emitter with fewer parts for easier maintenance, less re-alignment and increased reliability.

- Ion gun improves the adhesion of coatings on various types of substrates and can be used during the layer deposition (ion assistance).
- Full compatibility with Satisloh's MES-360 manufacturing execution system.
- Special substrate holders to produce gradient/bi-gradient/absorbing coatings and available upon request

## OPTIONS

Tooling solutions for all process applications:

- 6-sector dome (standard and/or ringless)
- 3-sector\* dome (ringless)
- Full\*\* dome (ringless)

*\* Only available in Asia Pacific region*

*\*\* Excluding Asia Pacific region*



Lab 4.0 ready

### Capacity

- For lens  $\varnothing$  70 mm up to 264 lenses (6 ringless sector dome)
- For lens  $\varnothing$  70 mm up to 276 lenses (3 ringless sector dome)
- For lens  $\varnothing$  70 mm up to 305 lenses full dome (ringless)

### Lens Materials

All organic materials and mineral glass

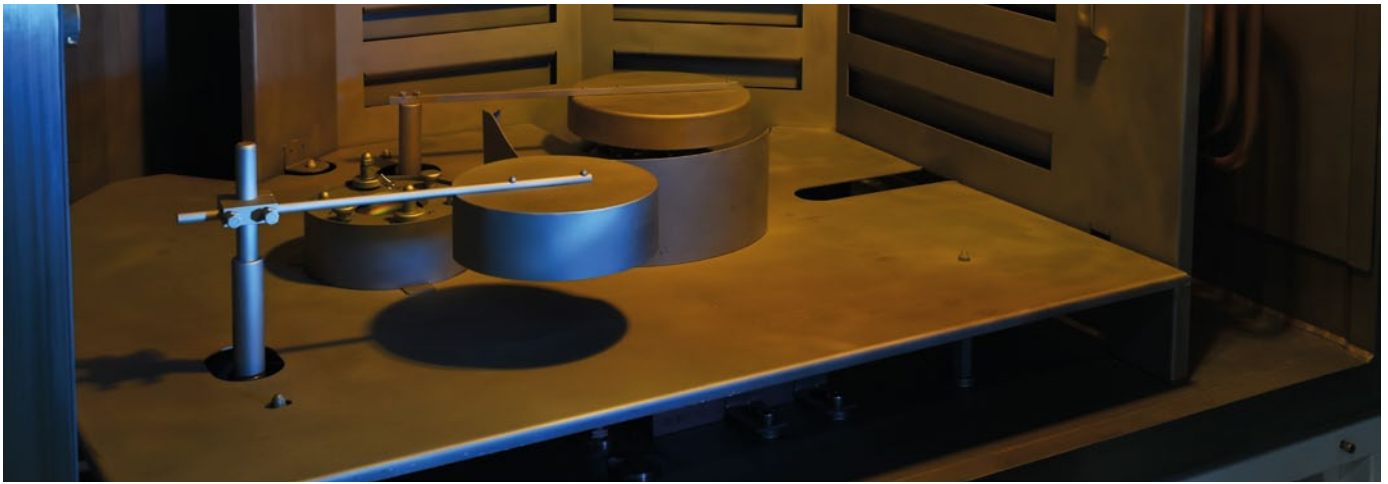
### Dimensions (wxdxh)

2384 x 3295 x 2765 mm / 94 x 130 x 109 in

### Weight

3900 kg / 8598 lb





## 1200-DLX-2

### Features + Benefits:

- Box coaters produce AR, mirror and top coatings on all lens materials via proven thermal evaporation process (PVD), guaranteeing the utmost level of quality
- Meissner trap with a 15% large surface area means faster pump times, higher throughput and an increased process repeatability
- Intelligent, movable shield system optimizes pumping speed and protects against surface contamination
- Improved chamber thermal stabilization due to a reinforced vacuum chamber with welded tubes
- Simplified e-beam emitter for easier maintenance and increased reliability
- New portable degassing system eliminates the need for expensive top heaters
- Green: reduced energy consumption by up to 25%
- Ion-assisted optimized deposition for best layer adhesion and hardness
- Touch screen and user-friendly control HMI software for easy job and process set-up and change
- Perfectly matched Satisloh coating processes, consumables and box coaters guarantee best coating performance
- Full compatibility with Satisloh's manufacturing execution system MES-360
- Special substrate holders to produce gradient/bi-gradient/absorbing coatings and available upon request

Satisloh's evolution of coating technology. The 1200-DLX-2 is built for maximum throughput requirements in large labs and stock lens production. It is based on its predecessor 1200-DLX but completely redesigned for maximized productivity, reliability, and energy efficiency. The system is available with 6-sector dome (standard), a ringless full big dome or a flip-over system for double-sided processing, offering solutions for all process applications.

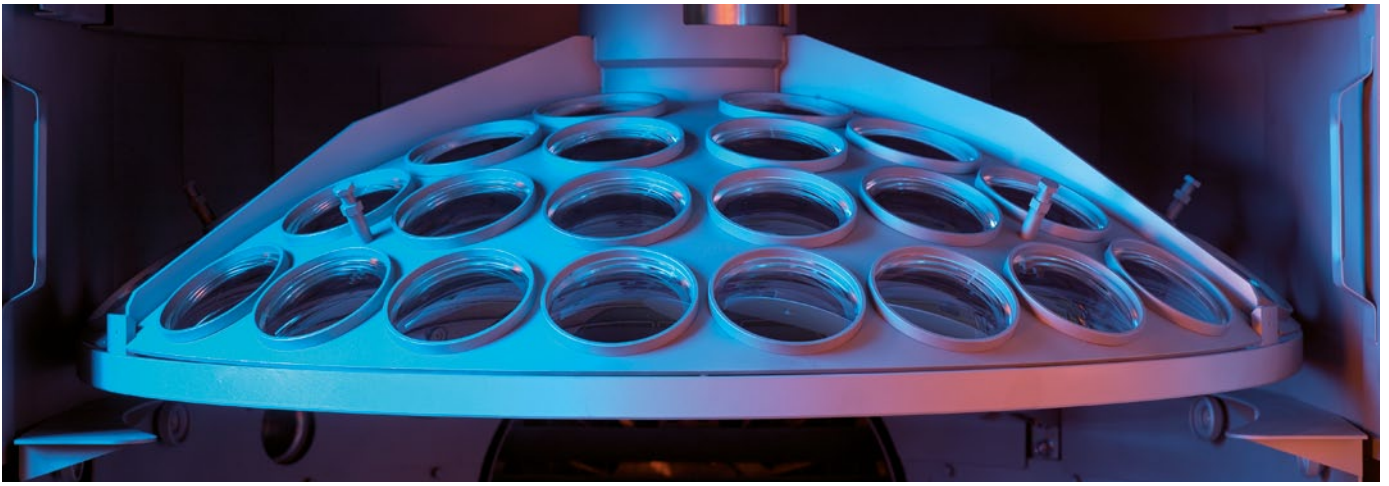


Lab 4.0 ready

<b>Capacity</b>	For lens Ø 70 mm up to 209 lenses (ringless dome)
<b>Lens Materials</b>	All organic materials and mineral glass
<b>Dimensions (wxdxh)</b>	2171 x 3145 x 2440 mm / 85,5 x 123,8 x 96 in
<b>Weight</b>	3637 kg / 8018 lb

For detailed technical specifications, scan the QR code or go to: [www.satisloh.com/techspecs](http://www.satisloh.com/techspecs)





## MC-380-X

### Features + Benefits:

This mid-volume box coater fits throughput requirements of medium to large Rx labs. Combined with an ultrasonic cleaning system, flow-box and degassing oven, Satisloh offers a complete coating lab solution: MC-Lab-380-X. The coating lab greatly increases efficiency with fully automated lens cleaning.

- 3-sector dome or a flip-over system for double-side processing
- Easy and fast swap from dome to flip-over lens holder
- Ion gun with shutter
- Electron beam gun with shutter
- Pump system with a powerful molecular turbo pump 1900 l/s
- User-friendly and intelligent HMI software
- Full compatibility with Satisloh's MES-360 manufacturing execution system.

## MC-280-X

### Features + Benefits:

This lower volume stand-alone box coater offers multiple process applications and provides highest flexibility for Rx labs with small batch requirements. MC-280-X features the same sophisticated AR and mirror coating processes as 1200-DLX and MC-380-X.

- Full dome, sector dome or flip-over lens holding systems
- Ion gun with shutter
- Electron beam gun with shutter
- Pump system with a powerful molecular turbo pump 1200 l/s
- User-friendly and intelligent HMI software
- Full compatibility with Satisloh's MES-360 manufacturing execution system



<b>Capacity</b>	For lens Ø 70 mm up to 60 lenses (3-sector dome)	For lens Ø 70 mm up to 30 lenses (Full dome)
<b>Lens Materials</b>	CR39, Polycarbonate, High Index, Acrylic, Photochromic, Mineral glass	CR39, Polycarbonate, High Index, Acrylic, Photochromic, Mineral glass
<b>Dimensions (wxdxh)</b>	940 x 2250 x 2450 mm / 37 x 89 x 96 in	1453 x 1481 x 2124 mm / 57 x 58 x 84 in
<b>Weight</b>	1453 kg / 3203 lb	1150 kg / 2535 lb

For detailed technical specifications, scan the QR code or go to: [www.satisloh.com/techspecs](http://www.satisloh.com/techspecs)





## BOX COATERS CAPACITIES & PROCESSES

	1500-X	1200-DLX-2	MC-380-X	MC-280-X
<b>Processes</b>				
Ultimate Carbon*		X	X	X
Premium	X	X	X	X
Performance	X	X	X	X
Classic		X	X	X
Multicote X		X	X	X
Spectraflex X	X	X	X	X
Metallic mirrors	X	X	X	X
Absorbing coatings	X	X	X	X
<b>Sector dome**</b>				
diam. 65 mm	270	198	72	30
diam. 70 mm	246	168	60	27
diam. 75 mm		150	57	24
diam. 80 mm		126	45	24
<b>Ringless full big dome</b>				
diam. 65 mm		245		
diam. 70 mm	305	209		30
diam. 75 mm		174		
diam. 80 mm		156		26
<b>Flip over</b>				
diam. 65 mm		144	42***	14****
diam. 70 mm		120	42***	14****
diam. 75 mm		108	35***	14****
diam. 80 mm		96		14****

\* Brand name in North America \*\* Ringless sector available on request  
 \*\*\* Available with usual and fast flip over system \*\*\*\* Fast Flip over system

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