

PVD thin film deposition

Detailed Specifications:

Vacuum Chamber Specifications

Rectangular Chamber Design 500 mm x 500 mm x 500 mm (width x depth x height) (inner volume 125 l)

Full stainless steel with rear hinged service door and front sliding door

Removable protective shielding

Base flange with 24 high vacuum ports for source mounting

Top flange with high vacuum feedthroughs for substrate shutter and substrate rotation

DN160 interface for vacuum pump stack

Shielded DN100 viewport in front door

Evaporation Technology

Thermal resistance evaporation

Temperature controlled organic evaporation

RF, DC or DC Pulsed Magnetron sputtering

RF Magnetron sputtering with reactive gases and upstream or downstream control (mass flow controller)

Electron beam evaporation with multiple pocket arrangements

Substrate

For substrates up to 100x100 mm or 150 mm wafers

Heated/cooled substrate holder from -30°C up to 100°C

Rotation up to 33 RPM

Ultimate vacuum

Down to: $< 9 \times 10^{-7}$ mbar

System control

Siemens PLC with multi-color touch screen

Inficon controller for rate control/monitoring

Recipe management

Substrate pretreatment

Integrated quartz lamp heaters

Optional in-situ systems available on request

1 year MDCare PhD Technical Support Plan.