

Super high speed Evaporator System

(초고속 진공 증착기)

Specification

Chamber



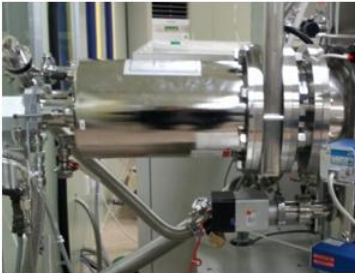
Main Chamber : Rectangular Type

Loading Chamber : Circular Type (Optional)

Material : SUS 304

Chamber internal shield cover
(Easy exchange type)

Vacuum pump

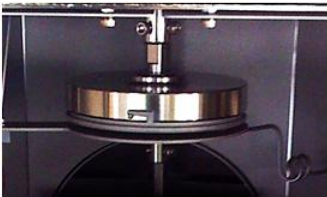


Turbo pump or Cryo Pump (Optional)

Rotary pump (Optional : Dry pump)

High Vacuum Gate Valve

Substrate



Sample Size : Piece ~ 6" Wafer (Etc Optional)

Single sample Rotation Type (One process)

Multi sample Rotation Type (One process)

Rotation & Revolution Substrate (Optional)

Substrate Shutter

Rotation speed : 0 ~ 30 R.P.M

Revolution speed : 0 ~ 30 R.P.M

Specification

Thickness Monitor



Thickness Monitor or Controller (Optional)

Rate Monitoring or Rate Control type

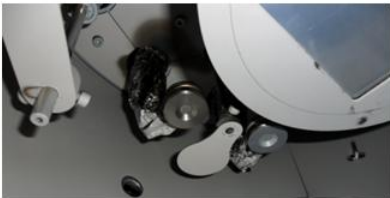
Rate Resolution : Below than 0.1Å/Sec

Single or Dual sensor mount type
(Multi sensor is optional)

Co-deposition available (Optional)

Thickness sensor Shutter (Optional)

Supply Brand (Inficon or Sycon)



Source & Power Supply



Source : Induction Coil & Crucible (Optional)

Crucible Size : 15cc ~ 100cc (Optional)

Source Housing Water Cooling

Induction Coil Water Cooling

Induction Power Frequency : 10~30KHz

Power Capacity : 10kW ~ Optional

Inside water cooling

Source Shutter



Specification

Required Services

Main Power : 220V or 380V, 3 Phase, 50A

PCW (Water) : 2~3kgf/Cm²

Compressed Air : 5.5~6 Kgf/Cm²

N₂ Gas (Chamber Vent) : 1~2 Kgf/Cm²

Exhaust : Ø40 Flexible Hose

Remark

Chamber Ultimate Pressure (One Chamber type)

; Below than 2×10^{-7} Torr

Pumping speed (One Chamber type) : Below than 5×10^{-6} Torr

; Below than 3×10^{-6} Torr (Within 30 Minute after Sample loading)

Film deposition Uniformity : Below than $\pm 5\%$

Deposition Rate control range : 1Å/Sec ~ 1000Å/Sec

(Thin film ~ thick film control available)

Deposition Material : Cu, Al, Ag, etc Metal Process

Application

① Fast thick film deposition process

Deposition Rate : More than 1000Å/Sec

② Instead of wet plating (Cu, Al, Ag, Cr, Ni, etc metal film)

③ TSV (Through silicon via) Process