

Magnetron Sputtering System



Process Chamber



Circular or Rectangular

Al6061 or SUS 304

Loadlock Chamber (Optional)

Cassette Chamber (Optional)

Up or Down Sputtering

Chamber internal shield cover
(Easy exchange type)

Sample Transfer Type



Magnet Bar Type

Rack & Pinion Type

Dual Air Cylinder Type

Roller & Timing Belt Type

Robot Arm Type

Manual, A.C or D.C Motor, Stepping
Motor, Servo Motor

Process Vacuum Pump



Turbo Pump + Rotary Pump

Turbo Pump + Dry Pump

Cryo Pump + Rotary Pump

Cryo Pump + Dry Pump

Auto Line Vent Function

Inlet & Outlet Mist Trap

Substrate Unit



Sample Size : Piece ~ Optional

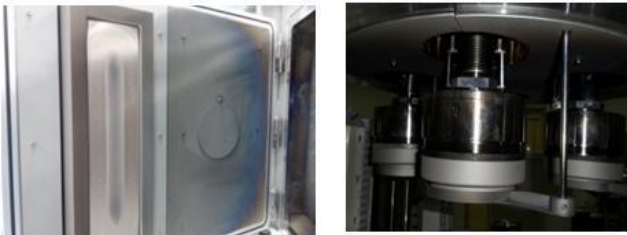
Heating Element : SiC or I.R Lamp

Max Heat up Temperature : Max 900°C

Single or Multi Zone Temp Control

Substrate Rotation : 0~ 30 R.P.M

Sputter Cathode



Cathode Size : 2" Dia ~ Rectangular

R.F (13.56MHz) or D.C Power
Compatible Permit Power

Cathode Orientation :

- Planar Type (Vertical or Horizontal)
- Variable Tilt Angle Type (Optional)

Wide Range Sputtering Zone

Easy Shield Exchange Type

Z-Motion Manipulator (Optional)

Normal & Backing Plate Bonding



Magnetron Sputtering System

Pressure Control & Gas Flow



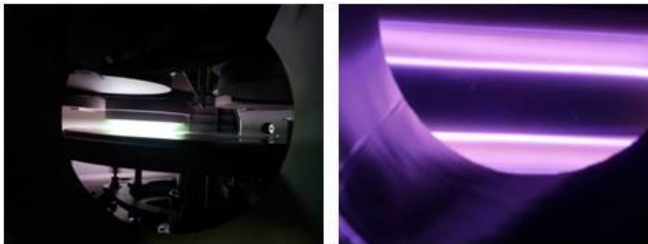
Ar, O₂, N₂ (10 ~ 50 Sccm)

Capacitance Manometer (1 or 0.1Torr)

Throttle Valve or Pendulum Valve

Pressure Control : 10⁻¹ ~ 10⁻⁴Torr

Cathode Power Supply



Power Insert Connector : N or HN Type

D.C, Pulsed D.C or R.F (13.56MHz)

Power Select Unit (Optional)

Single or Co-Deposition Available

System Control



Semi-Auto control type

(Optional : Full auto control type)

Full automation control type using
Touch Screen or P.C Monitor

Electrical, Mechanism, vacuum, utility,
etc all safety interlock

Remark

Chamber Ultimate Pressure

; Below than 2 x 10⁻⁷Torr (One chamber), Below than 10⁻⁸Torr (Two chamber)

Pumping speed (Two Chamber type)

; Below than 3 x 10⁻⁶ Torr (Within 10 minute after sample loading)

Film Uniformity

< ± 5% (WIW, WTW, RTR)

Heating Uniformity

< ± 2% (Within Each sample size)

Provides operating & maintenance manual

Warranty : 1 Year (Exclude consumables parts)