Sputtering system

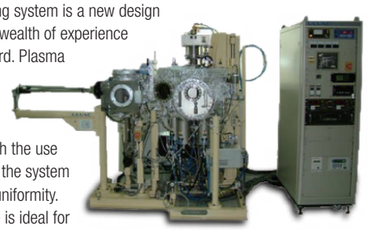
ULVAC offers a wide range of sputtering systems with a proven track record.

Ultra-High Vacuum Sputtering System for R&D

MPS Series

Features

The MPS series sputtering system is a new design developed based on our wealth of experience and extensive sales record. Plasma discharge pressure can be maintained lower than conventional sputtering, and along with the use of long throw sputtering, the system is capable of very good uniformity. The angle of the cathode is ideal for Co-sputtering and multilayer films.



MPS Series

Batch-type Sputtering System

SX Series

Features

Batch-type Sputtering System SX series is for batch type sputtering system for research & development and small production application.

SX Series

Compact Sputter Sputtering System

ACS-4000

Features

The ACS-4000 is designed for the R & D industry and for the development of multi-layer thin films, compound materials and other technology. The system can handle up to 4 inch substrates and comes equipped with automatic process operation.

ACS-4000

Load Lock Type Compact Sputtering System

CS-S

Features

Load lock type compact sputtering system CS-S supports various materials for R & D and Mass production equipment.

CS-S

High Productivity Sputtering System

SRH Series

Features

SRH Series is a high volume PVD system for the deposition of metallic films required in the power device, WL-CSP, UBM or similar applications.

SRH Series

Sputteing System for Optical Filters and Coating

ULDiS Series

Features

The ULDiS sputtering system is designed specifically for optical applications. ULVAC has signed a license agreement with JDS Uniphase Corporation in the U.S (license MetaMode®). This system is capable of depositing materials for high-quality optical filters and coatings.

ULDiS Series

Evaporation system

ULVAC has delivered more than 3000 evaporation systems.

Batch or Loard Lock Type High Vacuum Evaporation System

ei Series

Substrate size: ϕ2 to 6 inch Supports rectangular, Si, compounds, glass and ceramics substrates

Features

- Batch type system, available with loading chamber.
- 3000 delivered systems.
- Various evaporation sources can be loaded. (EB, RH, EB + RH)
- Substrate holders according to the process. (lift-off, planetary, satellite, etc.)
- Touch Screen LCD for system operation.
- Superior PC-operating system and functions. (Recipe, Data logging, Maintenance assist)

ei-7L (with loading chamber)

ei-5(Batch type)

EVD

Batch type high Productivity evaporation System

EVD

Substrate size: ϕ2 to 8 inch

Features

- Batch type.
- Improved Lift-off function and increased number of loadable substrates.

Spec

Item	Description
Vacuum performance	Ultimate pressure: 3.0×10-5 Pa or less Pumping speed: 20 min from atmospheric pressure to 3.0×10⁻¹(Pa)
Sputtering performance	Film thickness uniformity: ± 5% or less Incident angle: < 10° (@4 in)
Substrate heating performance	Max. temperature: 350°C Temperature distribution: +/-10°C or less
Capacity	282 pc/ Φ 2 in 87 pc/ Φ 4 in 36 pc/ Φ 6 in

Series List

	ei-5	ei-6	EVD	ei-7	ei-7L	ELX-2000
	batch type				Load-look type	
Loaded number Revolution dome	24 pc···Φ4 in 8 pc···Φ6 in	24 pc···Φ4 in 8 pc···Φ6 in	87 pc···Φ4 in 36 pc···Φ6 in * Planetary only for this system	44 pc···Φ4 in 20 pc···Φ6 in	44 pc···Φ4 in 20 pc···Φ6 in	12 pc···Φ4 in 4 pc···Φ6 in
SS distance	680mm	1,000mm	730 to 750mm	900mm	900mm	600mm
Substrate holder	Revolution, Planetary or Satellite can be selected	Revolution, Planetary or Satellite can be selected	Planetary	Revolution, Planetary or Satellite can be selected	Revolution	Revolution
Incident angle (Lift-off)	4.3° ···Φ 4 in 6.4° ···Φ 6 in	3.0° ···Φ 4 in 4.4° ···Φ 6 in	10° ···Φ 4 in 15° ···Φ 6 in	3.3° ···Φ 4 in 4.9° ···Φ 6 in	3.3° ···Φ 4 in 4.9° ···Φ 6 in	4.9° ···Φ 4in 7.9° ···Φ 6 in
Footprint	W2.0m* D3.0m* H2.0m	W3.0m* D3.0m* H2.5m	W2.3m* D3.0m* H2.0m	W2.3m* D3.0m* H2.0m	W5.5m* D4.0m* H2.7m	W3.2m* D3.0m* H2.3m
Features	・Both EB + RH evaporation types are available ・Dual sensor (2 pieces) ・Power supply and compressor are incorporated into the frame ・Unified control on the operation panel ・Logging function ・large install base ・Movable correction plate ・Low power and high rate with W hearth liner	In addition to features of ei-5, ・Improved lift-off with Long_SS ・Low damage ・Elevating dome	・Both EB + RH evaporation types are available ・Dual sensor (2 pieces) ・Lift-off type planetary style dome ・Both Max. loading and lift-off are satisfied ・Low damage ・Unified control on the operation panel ・Logging function ・Movable correction plate ・Low power and high rate with W hearth liner	・Increased number of loadable substrates ・Low damage ・Both EB + RH evaporation types are available ・Multi-sensor (12 pieces) ・Movable correction plate ・Elevating dome ・Unified control on the operation panel ・Logging function ・Low power and high rate with W hearth liner	In addition to features of ei-7, ・Supports C to C (OP) ・High Throughput (especially, heating process) ・Material exchange (OP) ・Unified control on the operation panel ・Logging function ・Movable correction plate ・Low power and high rate with W hearth liner	・High Throughput (especially, heating process) ・Both EB + RH evaporation types are available ・Dual sensor (2 pieces) ・Material exchange (OP) ・Elevating dome ・Unified control on the operation panel ・Logging function ・Movable correction plate ・Low power and high rate with W hearth liner
Actual sales	499 From 2004	11 From 2005		27 From 2009	7 From 2009	3 From 2010
Processed number per hour	15 pc/hr···Φ 4 in 5 pc/hr···Φ 6 in	13 pc/hr···Φ 4 in 4 pc/hr···Φ 6 in	52 pc/hr···Φ 4 in 21 pc/hr···Φ 6 in	26 pc/hr···Φ 4 in 12 pc/hr···Φ 6 in	43 pc/hr···Φ 4 in 19 pc/hr···Φ 6 in	14 pc/hr···Φ 4 in 4 pc/hr···Φ 6 in