

SMART Evaporation PVD

Versatile Research Physical Vapor Deposition



SVT Associates, Inc.

- Leading manufacturer of thin film deposition equipment since 1993
- In-house laboratory for materials research and process development
- Established a diverse range of deposition components, systems, integrated sensors, and process control
- Developed strong combination of equipment manufacturing and process know-how
- Seven Applications Laboratory deposition systems producing world class materials
- Diverse system product line spanning the thin film deposition market
- Leading supplier with over 190 systems in the field

SMART Evaporation PVD

- SVT Associates SMART (Scientific Materials and Applied Research Tool) Physical Vapor Deposition System is a unique research tool. Combining multiple deposition techniques in a single chamber allows researcher to continually develop complex materials for the future as well as simple processing techniques.
- The compact footprint preserves laboratory space.
- Optional in-situ monitoring tools provides the user with enhanced process feedback.
- Available load lock sample handling allow the SMART system to interface with other deposition or metrology tools.

Applications

- Multiple Technique Thin Film Deposition
- Ohmic Contact Deposition and Annealing
- Ion Beam Process (Etch and Deposition)
- Semiconductor Mask Preparation
- Metallization



SMART NanoTool PVD-Thermal and E-Beam Deposition Tool

SMART NanoTool T-01 and SMART NanoTool E-01:

BASE SYSTEM

Chamber and Vacuum Pumps

12" Quick Access Door, 250l/s Turbo Pump

Deposition Sources

SMART NanoTool T-01

Three Thermal Evaporation Boats with Shutters

SMART NanoTool E-01

Water Cooled 4-Pocket Electron Beam Evaporator

Deposition Stage

SMART NanoTool T-01

1" (25.4 mm) Sample Size, Continuous Rotation

SMART NanoTool E-01

1" (25.4 mm) Sample Size, Heating to 800 C, Continuous Rotation, z-Direction Translation

In-Situ Process Monitoring Tools

Quartz Crystal Deposition Rate Monitor

Gauges

Full Range Gauges

ADDITIONAL OPTIONS

Deposition Sources

Thermal Evaporation Sources, Effusion Cells, Sputter Sources, E-Beam Evaporators

Deposition Stages

Multiple Options Up to 3" Sample Size

Metrology Tools

RHEED Packages

Vacuum Packages

Ion Pumps, Turbo Pumps, Cryo Pumps, Gate Valves

Gauge Packages

Multiple Gauge Packages Available

Gas Control Packages

Mass Flow and Leak Valve Packages

Loadlock Package

Loadlock, Docking and Transfer Configurations

AUTOMATION

Advanced Automation Packages Available

