

# SMART Evaporation PVD

## Versatile Research Physical Vapor Deposition



### SVT Associates, Inc.

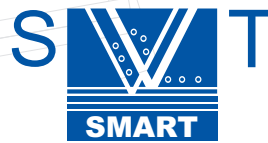
- Leading manufacturer of thin film deposition equipment since 1990
- In-house laboratory for materials research and process development
- Established a diverse range of deposition components, systems, integrated sensors, and process control
- Developed strong combination of equipment manufacturing and 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 120 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

