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

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31" (787 mm)
52" (1,321 mm)