

Model SP 2000

Magnetron Sputter Deposition System

The affordable sputtering solution that comes tailored to your requirements!

VPT's **SP 2000** Magnetron Sputter Deposition System is a flexible, multi-function sputter tool that can be used for multi-layer metal, reactive, and dielectric thin film coatings. This system is ideal for research and development and small batch pilot production. VPT's PC / PLC based control system with flexible process software allows fully automatic operation with loading and unloading of the substrates the only operator intervention required.

Flexible Configurations:

The **SP 2000** comes with a wide range of features carefully tailored to support your specific coating application. The standard substrate chuck is designed to handle 2 to 6 inch wafers. Substrates are loaded through a 10-inch view port door or optional loadlock.



Additional Features and Options:

- Confocal or Parallel Cathode configurations
- RF, DC, or Pulsed DC Cathode power supplies
- Multi-channel gas flow control system
- Downstream pressure control
- Top cover with vertical lift for ergonomic system maintenance
- Optional heated, rotating substrate chuck
- Optional load lock system
- Optional substrate planetary rotation system

Model SP 2000 Base System and Options

Process Chamber	Cylindrical, 24-inch diameter by 18-inches high Top cover with vertical lift Stainless steel internal evaporant shields 304L SS, Ultimate leak rate $\leq 1 \times 10^{-8}$ atm-cc/s OPTIONAL Load Lock System Custom chamber sizes are also available.
Rough Pumping	Mechanical roughing pump OPTIONAL Dry pump
High Vacuum Pumping	Cryopump OPTIONAL Turbo pump
Substrate Heating	OPTIONAL Substrate chuck heater
Deposition Sources (typical)	Up to three (3), 6-inch diameter magnetron cathodes Up to four (4), 3-inch or 4-inch diameter magnetron cathodes
Source Power Supplies	RF, DC, Pulsed DC
Layer Thickness Monitoring	OPTIONAL Quartz crystals (number & locations as needed)
System Controls / Automation	PC / PLC platform with RSView 32 HMI operator interface
Process Gas	Multi-channel flow control system
Utilities	Electrical: voltage as required, 3 Phase, 15-20 kVA Air: 80 – 90 PSIG Water: 10-12 GPM, 60 – 70 degrees F

Many more details available at www.vptec.com

