

## 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

<b>Process Chamber</b>	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 <b>OPTIONAL Load Lock System</b> <b>Custom chamber sizes are also available.</b>
<b>Rough Pumping</b>	Mechanical roughing pump <b>OPTIONAL Dry pump</b>
<b>High Vacuum Pumping</b>	Cryopump <b>OPTIONAL Turbo pump</b>
<b>Substrate Heating</b>	<b>OPTIONAL Substrate chuck heater</b>
<b>Deposition Sources</b> (typical)	Up to three (3), 6-inch diameter magnetron cathodes Up to four (4), 3-inch or 4-inch diameter magnetron cathodes
<b>Source Power Supplies</b>	RF, DC, Pulsed DC
<b>Layer Thickness Monitoring</b>	<b>OPTIONAL Quartz crystals</b> (number & locations as needed)
<b>System Controls / Automation</b>	PC / PLC platform with RSView 32 HMI operator interface
<b>Process Gas</b>	Multi-channel flow control system
<b>Utilities</b>	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](http://www.vptec.com)

