

# New from SEMICORE



## Impel PVD Multi-Chamber Deposition Systems

**Semicore's** Impel PVD systems utilize a cost-effective modular design that is easily configured to suit a variety of thin film deposition applications, typically for R&D or small batch production. Up to three process chambers, each uniquely configured for a specific application, share a central load lock for handling various substrate shapes and sizes up to 200mm. Integrated computer control with recipe based operation, tolerance checking and data logging is featured. A comprehensive list of standard options is available to configure the Impel PVD system to suit your specific requirements. Bulkhead or ballroom installation is available.



Complete Solutions for Standard and Custom Vacuum Deposition

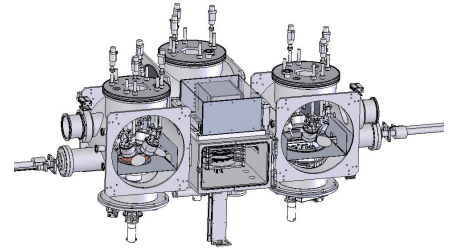
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[www.semicore.com](http://www.semicore.com)

## Impel PVD FEATURES & OPTIONS

### VACUUM CHAMBER

Up to three independent process chambers, 16 or 24 inch diameter, stainless steel - scaled to match the specific application.  
Rear chamber access door for service and maintenance.



### ALUMINUM DOOR WITH VIEWPORT (standard)

### PUMPING

Turbomolecular or cryogenic.

### LOAD LOCK

Manual or automatic transfer, high vacuum pumping, various substrate sizes and shapes up to 200 mm.

### PROCESS CONTROL

Integrated computer control with recipe based operation.



### MONITORING

Crystal monitoring, optical monitoring and special data gathering software for in-situ measurement of film deposition.

### SUBSTRATE HOLDERS

Rotating substrate holder can be heated, cooled or biased.



### GAS AND PRESSURE CONTROL

Single or multi MFC gas channels, dynamic pressure control.

### ION SOURCE

Pre-cleaning, IBAD - assisted deposition, milling.

## Impel PVD DEPOSITION TECHNIQUES

### MAGNETRON SPUTTERING

RF, DC, or Pulsed-DC.

### ELECTRON BEAM EVAPORATION

### THERMAL EVAPORATION

### ORGANIC EVAPORATION

For OLED/PLED and organic electronics.

### GLANCING ANGLE DEPOSITION (GLAD)

### CATHODIC ARC PLASMA DEPOSITION

### PULSED LASER DEPOSITION (PLD)



Semicore PVD systems are also available in single chamber configurations for R&D applications. Contact Semicore or see our web site for details.



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