



# Odyssey 450 Deposition System



The Dynavac Odyssey 450 Deposition System is a small-scale tool that provides an affordable, turnkey solution for batch processing of substrates. Typical applications include materials research, nanotechnology, semiconductor failure analysis, compound semiconductors and MEMS. With its compact footprint, it is ideal for process development, pilot production, and research laboratories in both industry and universities.

## System Highlights

- Provides highly efficient, uniform deposition of many materials
- Flexible architecture supports multiple processes and upgrades
- Load lock option provides high-throughput processing
- Chamber and instrumentation self-contained in moveable cabinet



### Vacuum Chamber

- 450 mm W x 450 mm D x 600 mm H with full opening door
- Easily removable internal shielding
- Load locks with manual or automated transfer available

### Pumping System

- Pumpdown from atmosphere to  $5 \times 10^{-6}$  Torr < 30 minutes
- Dry mechanical pump
- Turbomolecular pump for high vacuum pumping
- Cryopump option available
- Mass flow controller for process gas flow

### Substrate Fixturing

- Rotating table accommodates substrates up to 250 mm
- RF bias option
- Other configurations available

### System Control

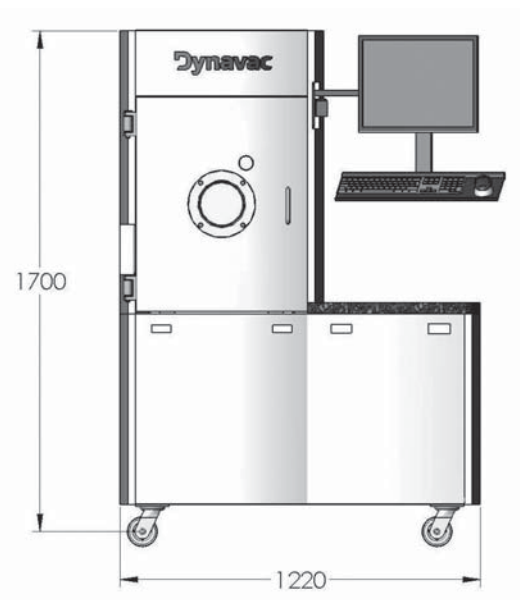
- Programmable logic controller operates system in manual or automatic modes
- User interface through supervisory computer running LabVIEW® HMI software
- Convectron and ion gauge controller monitors chamber pressure

### Deposition Equipment

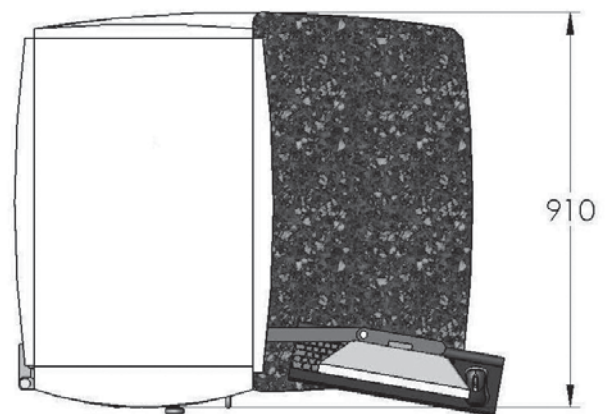
- Supports AC, DC, and RF sputtering
- Base system incorporates (3) 75 mm magnetron sputter sources in confocal position
- Quartz crystal monitor with single-head sensor
- Other options available

### Utilities

- Electrical: 208-240V, 1 $\phi$ , 60Hz, 30A
- Compressed air: 80-100 psig
- Cooling water: 1-2 gpm @ 60-80 °F



Front View (mm)



Top View (mm)