

Magnetron Sputtering Deposition Systems

Plasma Technology Limited PTL provides a wide variety of high quality magnetron sputter deposition systems to meet customers' thin film deposition requirements.

Our systems use PTL magnetron sputter sources with our field proven fully modular magnetic array and cross-contamination prevention design. Systems come with complete pumping packages, vacuum gauges, MFCs, pneumatic valves, closedloop feedback for constant pressure control, power distribution box, frame, electronic racks, water and air manifolds, and safety interlocks.

Our systems can be operated manually or via computer control. Substrate rotation stage includes heating to temperatures of 900°C, 50mm Z-distance adjustment to provide a wide range of deposition rates, RF/Pulse/DC bias for cleaning and assisting deposition.



Load Locked Magnetron Sputtering System

Includes five 2" PTL magnetrons with in-situ tilt, RF biased rotated 900°C substrate heater. Includes three MFCs and full computer control.



Magnetron Sputtering System Interior

PVD sputtering system with six 2" PTL con-focal magnetrons with in-situ tilt & pneumatic shutters

Systems can be configured for sputter-up, down, or sideways with confocal or normal incidence source arrangements. The integrated load lock provides quick sample turnaround, so the user can spend more time exploring properties and less time making samples.

PTL sputter systems provide users with a wide range of capabilities for the growth of new materials.

All system data is stored in easily accessed look-up tables. Deposition recipes can easily be written for a single array for automated film growth, ensuring consistency of results. The system is touch-screen plus keyboard-mouse computer controlled and provide multiple user levels access for data logging of all relevant deposition parameters.

We can provide a standard or fully customized system depending on your application.

MAGNETRON SPUTTERING SYSTEMS



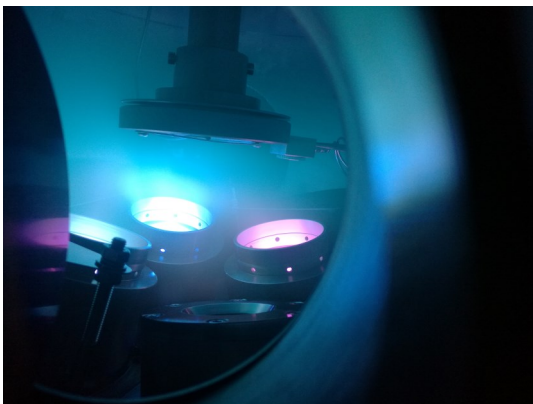
Sputter-Up PVD System

150 mm wafers, four 3" PTL confocal Magnetrons, Z-stage, 850°C heater, RF bias, 0-30RPM rotation three MFCs and full computer control.



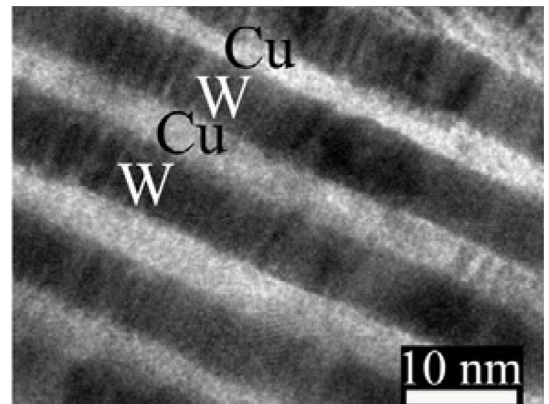
Load Locked Sputter-Up System

100 mm wafers, six 2" PTL confocal Magnetrons, Z-stage, 850°C heater, RF bias, 0-30RPM rotation three MFCs, loadlock and full computer control.



Stable Glow Discharge Sputtering

PTL magnetron sputter sources with our field proven fully modular magnetic array and cross-contamination prevention design, ensuring stable plasma glow discharge and consistency of depositions.



Multilayer Stacks by PVD Systems

Adjusting the magnetron to substrate distance, control the output power of magnetron sputtering power supply as well as the deposition time, one can easily to achieve a controllable multi layer thin film

