PVD Products, Inc.
Magnetron Sputter Deposition Systems

Photograph of a loadlocked magnetron sputter system for 4" diameter wafers. The system includes three 3-inch magnetrons with in-situ tilt, RF biased substrate heater for temperatures of 850°C, and base pressure below 5 x 10^{-9} Torr along with an RGA, an UHV three pocket ebeam evaporator, RHEED, and Ellipsometry.

PVD Products provides high quality magnetron sputter deposition systems to meet our customer's thin film requirements. Our systems use PVD's Titan Magnetron Sputter sources with a field proven modular magnetic array. Systems come with complete pumping stations, all vacuum gauges, power distribution box, electronic racks, water and air manifolds, safety interlocks, etc. Systems can be operated manually or via computer control. Substrate planetary or rotation stages can include heating to temperatures in excess of 950°C depending on substrate size and materials. Substrate heaters and manipulators can be designed for non-standard substrate shapes and sizes. Systems can be configured for sputter-up, sputter-down, or sputter-sideways with either confocal or normal incidence magnetron sputter source arrangements. Systems options include tiltable magnetrons, DC or RF bias, multiple power supplies and power supply switching, load locks, quartz crystal rate monitors, fully automated computer control, and various metrology tools such as RHEED, Ellipsometry, and in-situ Stress Measurements etc.
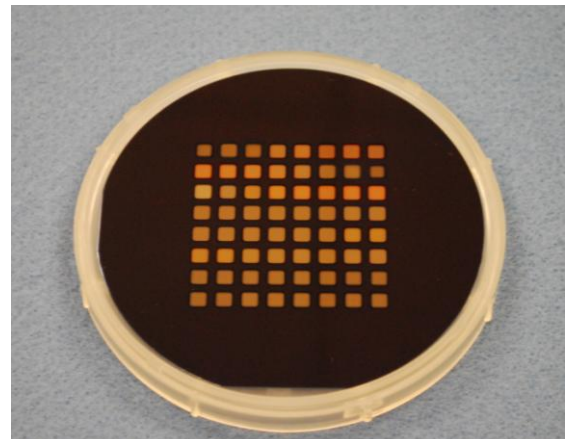
Shown above is a combination three-source magnetron sputtering system with a single thermal evaporation source. Includes an RF biased substrate heater to heat 4-inch substrates to 800°C along with a loadlock for quick substrate transfers. CE marked.

Three UHV Magnetrons with In-situ Tilt, Chimney's and shutters along with QCM & RHEED

Combinatorial Wafer with 8 x 8 array of different materials.