

Production Deposition Systems

PVD Products works hard to communicate with our customers during the specification phase in order to provide a wide variety of high quality production deposition systems. These include film thickness uniformity, film quality, and system throughput. PVD Products uses all well-known commercial brands for critical components in our systems to maximize up time.

Our range of deposition systems covers sputtering, evaporation, IBAD, PECVD, reel-to-reel applications, and laser deposition. PVD Products also makes cluster tools with multiple modes of film growth. We have delivered multiple tools that handle parts as large as 48 inches in diameter, and reel-to-reel deposition systems for tapes 1 km in length.

PVD Products also provides standard 100 to 300 mm diameter wafer tools with multiple magnetrons in confocal arrays or e-beam evaporation with planetary motion and high temperature heaters. Multi-wafer loadlocks, dual chamber loadlock systems are readily available.

Cluster System with Multi-Wafer Loadlock

Brooks MagTran 7 Robot in transfer chamber, preclean chamber, and deposition chamber for 150 mm diameter wafers.



Dual Electron Beam Evaporation System

IBAD and substrate heating for the growth of Epitaxial MgO onto metal tapes 1 km in length.

PVD Products provides electron beam deposition systems for custom and standard wafer sizes. Planetary systems with heaters for substrate temperature to 600°C or higher are available with IBAD if desired. Loadlocks and reel-to-reel systems are also part of our standard portfolio.

Systems are designed to customer specific requirements to ensure that you get a product that meets or exceeds your requirements. Systems with multi-pocket and/or multi-electron guns are available. We can also provide thermal evaporation units with e-beam systems.

We can handle a wide range of fixturing depending on your substrate sizes. Working closely with our vendors helps us ensure that our customers are getting the optimum design for their application.

PVD Products

Fueled by creative problem-solving, our team of experienced engineers and technicians is passionate about finding the best solution to your unique deposition system demands. We provide end-to-end support, from design through installation and continuing maintenance.

PVD Products can supply a wide variety of customized sputtering systems for your specific applications. These can include standard planar magnetron with circular targets, rectangular targets, and rotating cylindrical targets. We provide a wide range of power supplies for RF, AC, DC, Pulsed DC and HiPIMS applications along with a wide variety of DC/DC, RF/RF, and RF/DC switch boxes.

Systems for reactive sputtering of various oxides and nitrides are readily available with custom RF-biased heated or water-cooled substrate stages.

Continuous in-line systems with multi-wafer loadlocks are available along with ion source precleaning. Barrel type deposition chambers are also readily available.

Cluster tools with SCARA Robots and individual reaction modules for sputtering, etching, ALD, CVD etc. are readily available. Contact us with your specifications today.

Custom Production Sputter Tool

For substrates up to 48 inches in diameter





Reel-to-Reel Sputter Deposition Tool

Multiple linear magnetrons for high throughput applications

PVD Products can provide a full line of reel-to-reel deposition tools for foils, plastics, metal tapes etc. Deposition processes can include sputtering, evaporation, and pulsed-laser deposition.

PVD Products is one of the leading suppliers of R2R deposition equipment for the coated conductor high temperature superconductor industry with multiple R2R installations and repeat customers around the world.

Our systems are designed by engineers with decades of experience in the thin film capital equipment business. They are backed by our field-proven software, robust system designs, and strong technical after-service support.