

MAGNETRON SPUTTERING

What We Offer

Design &
Simulation



Prototyping &
Fabrication



Testing &
Characterization



Physical vapour deposition (PVD) is a family of vacuum-based techniques that convert a solid source material into a vapour to form thin films on a substrate. Magnetron sputtering is one of the main PVD methods, using energetic ion bombardment to eject atoms from a target material onto the substrate. This versatile process supports a wide range of metal, oxide, and dielectric coatings across research and industrial applications.

Key applications

Deposition of metal, alloy, and oxide thin films for semiconductor devices

Fabrication of electrical contacts, optical and protective coatings

Multilayer and dielectric stacks for sensors, photonics, and surface-engineering applications

EvoVac Angstrom Engineering

- Materials for deposition: Au, Cr, Ni, Ti, Mo, Al, Cu, In, Sn, Ag and their oxides
- Chamber temperature: 20 – 600 °C
- Working pressure: 2 – 25 mTorr
- Maximum substrate size: up to 4"
- Deposited layer thickness: 2 – 500 nm
- Process gases: O₂, Ar
- Adjustable sample-to-magnetron distance, up to 20 cm
- Equipped with four magnetrons:
- RF up to 300 W;
- DC up to 1.2 kW (DC Glassman Sputter);
- RF or DC;
- HiPIMS (High Power Impulse Magnetron Sputtering) with an Advanced Energy 5 kW Pinnacle Plus DC supply

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PVD 225 Kurt J. Lesker

- Single-layer and multilayer coatings
- Metals and dielectric coatings such as Cr, Ag, ITO, etc.
- Physical thickness of coatings from a few nm to tens of µm
- Optical monitoring control

Cleanroom class: ISO6

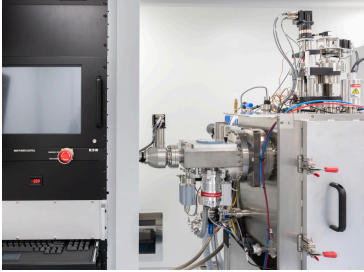
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Features:

- Flexible deposition modes, from standard RF/DC sputtering to high-rate HiPIMS pulsed processes
- In-situ substrate cleaning and layer removal via ion-beam etching
- Substrate rotation up to 50 rpm for film uniformity
- Load lock system for fast sample loading
- Possibility to deposit single-layer and multilayer coatings



If you have any questions, please contact us by email:
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