

Anything is possible with this PVD platform

EvoVac

Large chamber size. No compromise.



e
A **ANGSTROM**
ENGINEERING
Your Thin Film Partner

EvoVac

Deposition Sources

With its 500 mm x 700 mm baseplate, your EvoVac can accommodate up to 14 sources and a wide variety of PVD processes. The chamber can be integrated to a **glovebox**, a **cleanroom wall**, or selected in a standalone configuration. With our standard chamber height of 700 mm, your EvoVac system is very customizabable to your process requirements.

Sputtering

RF, DC, pulsed DC, reactive gas, and HiPIMS
Circular, linear & cylindrical cathodes available

Thermal Evaporation

Wide range of boats, filaments & crucible heaters
Auto-tuning ensures precise rate control and simple setup

Electron Beam Evaporation

Wide range of source and power supply options
Programmable sweep controller with recipe storage
Torque sensing crucible indexer detects pocket jams
Room for multiple e-beam sources in the chamber

Plasma and Ion Beam Processing

Range of ion sources for cleaning & film enhancements
Glow discharge plasma cleaning

Vacuum Control

Your EvoVac can be configured for **high vacuum (HV)** or **ultra-high vacuum (UHV)** utilizing a turbo pump or cryo pump. Chamber construction can be high-purity aluminum or stainless steel using Viton or metal gaskets. We can help you decide what is best for your application.



Substrate Fixturing and Masking

Heated, Cooled & Biased Stages

LN2/GN2 cooling to -170°C

Heating to 1000°C

Auto-calibration via AERES software

RF or DC stage biasing

Planetary & Dome Fixturing

Domed substrate carrier for lift-off and batch processes

Planetary motion & flip fixturing available

Load Locks & Mask Handling

Manual, semi-auto or full-auto substrate and mask handling
Options for single substrate or high capacity parking chambers

Roll to Roll Processing

Servo driven wind and unwind for precise speed and tension control

Allows flexible substrate coating using production technology

Process is scalable for high throughput

Variable Angle Stages

Comformally coat 3D features

Create complex nano-structures

-95° to 95° tilt with continuous rotation

Heating and cooling options available

Masking Shutter

Two programmable shutters allow selective exposure of rows and columns in a sample matrix to create many unique samples in a single run

"The level of service and connectivity to their customers, answering your emails any time of day, and helping you trouble shoot from afar is above and beyond what I had ever seen before. That interaction is what has made me a die-hard customer from here on out."

Dr. Casey Smith

Clean Room Director - Texas State University

AERES Advanced Process Control Software

Simple to use yet can handle the most complex process recipes

PC/PLC controlled recipes for single, batch, or fully automated processes

Advanced data logging and process tracking ensure consistent and repeatable processes

High resolution control provides impressive low rate stability and consistent doping ratios

Automatic PID control loop tuning significantly reduces process development time

Our team of engineers, chemists, and nanotechnologists will help design the best tool for your process and material requirements. We offer support and can optimize your system for film thickness uniformity, film structure and material utilization. Please call us to discuss your application in detail.

Your EvoVac can be everything you need it to be:



Precision optics e-beam evaporation system



OLED and organic lighting R&D lab



Transparent thin-film solar rapid development system



Multi-user, multi-purpose evaporator in busy research lab

Service and Support: Our Commitment

An Angstrom system in your lab makes us partners; we become part of your team. We guarantee **same day** response to any service inquiry regarding parts, technical support, and software support.



-  Head office and manufacturing facility
-  Service and Support facilities
-  Some of our existing systems in use



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