

A compact, economical, full featured PVD workhorse

Nexdep

An extremely versatile PVD platform



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

Nexdep

AERES Integrated Software

Simple to use yet highly advanced integrated software platform
PC/PLC controlled recipes for single, batch, or 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
Designed to be e95-1 compliant

Deposition Sources

With its 400mm x 400mm baseplate, your Nexdep can accommodate up to 8 sources and a wide variety of PVD processes. The process chamber can be integrated to a **glovebox**, a **cleanroom wall**, or selected in a standalone configuration. With two standard chamber heights; 500mm and 700mm, your Nexdep system is tailored to your process requirements.

Sputtering

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

Thermal Evaporation

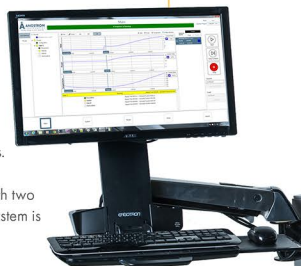
Wide range of boats, filaments & crucible heaters
Auto-tuning ensures precise rate control and simple setup

Electron Beam Evaporation

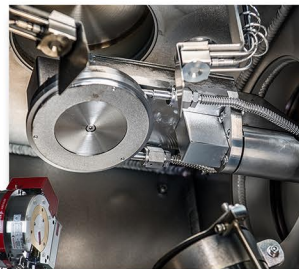
Wide range of source and power supply options
Programmable sweep controller with recipe storage
Torque sensing crucible indexer detects pocket jams

Plasma and Ion Beam Processing

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



Substrate Fixturing and Masking



Variable Angle Stages

Conformally coat 3D features
Create complex nano-structures
-95° to 95° tilt with continuous rotation
Heating and cooling options available

Heated, Cooled, & Biased Stages

LN₂/GN₂ cooling to -170°C
Heating to 900°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

Vacuum Control

Your Nexdep 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.

"I love our Angstrom deposition tools. They are reliable workhorses that are used at least five hours each day in my lab and they have been running exceptionally well with minimal upkeep for the past four years."

Trisha L. Andrew
University of Wisconsin-Madison

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 Nexdep could be almost anything:



Organic semiconductor evaporation system



Plasmonic nanoparticle development system



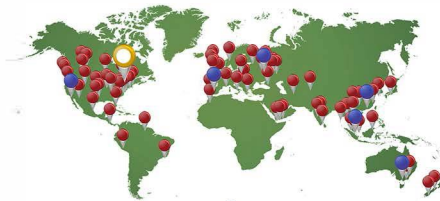
Sputter deposition for biomedical research



Cleanroom indium deposition system for sensor production

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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