

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 500mm x 700mm 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 700mm, your EvoVac system is very customizable 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

Room for multiple e-beam sources in the chamber

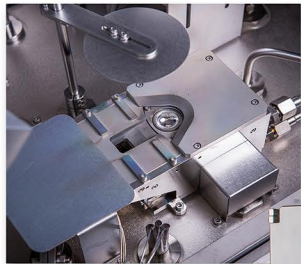
### Plasma and Ion Beam Processing

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

LN<sub>2</sub>/GN<sub>2</sub> 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

### Variable Angle Stages

Conformally coat 3D features

Create complex nano-structures

-95° to 95° tilt with continuous rotation

Heating and cooling options available

*"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 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

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



+1 519.894.4441

Kitchener, Ontario, Canada  
[www.angstromengineering.com](http://www.angstromengineering.com)

[sales@angstromengineering.com](mailto:sales@angstromengineering.com)