

EXPLORER®

THIN FILM DEPOSITION PLATFORM



DENTON VACUUM ENABLES INNOVATION AND HAS FOR OVER 50 YEARS.

With thousands of thin film deposition tools installed globally — including a large, globally installed base of precision optical deposition systems — engineers and researchers rely on Denton's thin film innovations to drive higher throughputs, better yields and low cost of ownership (COO) while benefiting from comprehensive service and support, and a dedicated R&D program that delivers enabling technologies.

The Explorer offers the widest range of configurations and deposition modalities in the thin film industry: electron beam evaporation, resistance evaporation, sputtering, ion plating, and ion assisted deposition.

Denton's Thin Film Deposition Platform

- R & D
- Batch production
- In-line production

- Evaporation
- Sputtering
- PE-CVD



DENTON'S THIN FILM DEPOSITION PLATFORM

THE DENTON DIFFERENCE

Your process is our process.

We collaborate with you to design a system that solves your exact thin film coating process needs. When we ship you a tool, it's production ready.

- Our systems scale to meet your production requirements
- We believe in customers for life
- Worldwide support network

AT DENTON, WE CARE ABOUT YOUR SUCCESS

- Factory acceptance tests
- Personalized training
- Remote, real-time support
- CE/UL/CSA compliant systems



ABLE TO SPUTTER

Dieletric, magnetic, and composite materials. Flexible cathodes that adjust to the impingement angle are also available.

POWERFUL CONTROL SYSTEM

Available in semi-manual mode or in fully automatic mode with one push automation to reduce system downtime.

PROCESSPRO UPGRADE OFFERS:

- 1. Consistent controls across all Denton Vacuum products.
- 2. **Standard software** makes it easy to support and avoid costly customization fees.
- 3. **Source code** for your programs so you can customize your programs.
- Network capabilities makes the Explorer a node on your network enabling real-time, remote support and upgrades.

FLEXIBLE CHAMBER SIZES

Accommodate substrates up to 10".

MULTIPLE PUMPING CONFIGURATIONS

A variety of diffusion, cryogenic, and turbo pump configurations are available to fit your budget and process. Rear or bottom fitted pumps provide easy access for service based on your workspace needs.

TYPICAL APPLICATIONS

PE-CVD

- Materials Research
- Small Batch Systems
- 3D Objects
- Coat a Variety of Materials

SPUTTERING

- Materials Research
- Product QC & QA
- Semiconductor Failure Analysis
- CD Mastering
- Nanotechnology
- Compound Semiconductors
- OLEDs

EVAPORATION

- Materials Research
- Ion Assisted Deposition (IAD)
- Medical Devices
- Telecommunications
- CD Mastering
- Lift-Off
- Protective Coating





Flexible Catode



EXPLORER® OPTIONS

	EVAPORATION	SPUTTERING	PE-CVD
SUBSTRATE HEAT UP TO 500C	Х	X	x
PROCESSPRO CONTROLS	X	X	X
CO-SPUTTERING		X	
RF/DC/PULSED POWER SUPPLIES		X	X
MULTIPLE CATHODE OPERATION FROM SINGLE POWER SUPPLY		x	
ION SOURCE	X		
LN2 COOLED SAMPLE STAGE	X	X	
GLASS BELL JARS	X		
SINGLE OR MULTI-POCKET ELECTRON BEAM GUNS	X		
PUMP OPTIONS			
DIFFUSION	X	X	X
CRYOGENIC	X	X	X
TURBO	X	X	X
OIL FREE	X	X	X
DRY-SCROLL	x	X	X

Specifications subject to change without notice.

ABOUT US

All Denton Vacuum solutions are backed by an 18-month warranty on parts and labor, over 50 years of process knowledge, an in-house process engineering group, worldwide representation and support, and a Global Factory Service Center.

