

# FLEXLAB®

FLEXIBLE CONFIGURABLE SPUTTERING SYSTEM

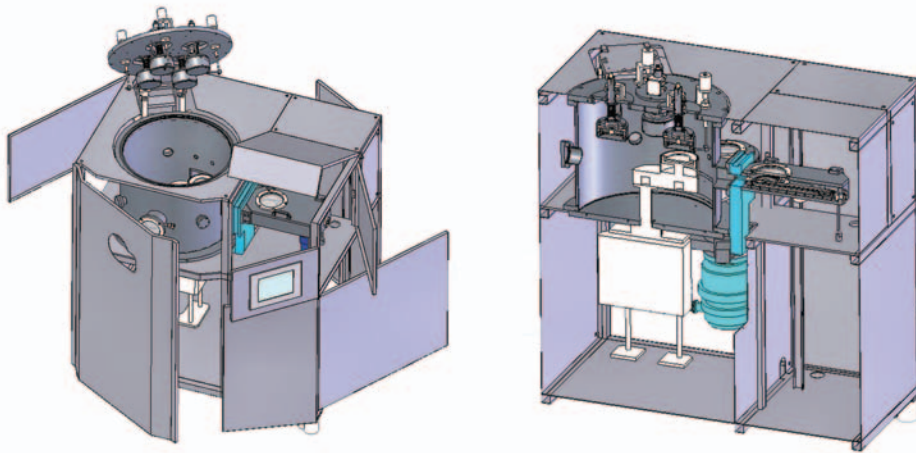


 TECPORT

## Flexlab Delivers Flexibility from Research and Development to Production.

Tecport relentlessly strives to develop innovative ideas to improve their product and competitiveness through continuous research and development of new processes, new chemicals, and new instruments.

Flexlab offers the customer the most versatile sputtering system in the market by virtue of its configurable system design. Its flexible design allows the customer to configure the system to perform upstream or downstream, single and multiple layers, and co-deposition.



## FLEXLAB ADVANTAGE

### FLEXIBLE DEPOSITION METHODS

Equipped with RF and DC Sputter Source to provide the capability of depositing metallic, inorganic and dielectric organic material.

### SPUTTERING MODES

A combination of four 3" sputter sources, or three 4" sputter sources allows multilayer and co-deposition capability with upstream or downstream sputtering methods.

### SYSTEM CONFIGURATION

Automatic load-lock system with compact design and optimization of sputter sources and shutter configuration minimizes cross contamination. Standard on Flexlab Systems.

## GENERAL SPECIFICATIONS

### MAIN CHAMBER

304L Stainless Steel Construction, 500 diameter x 460 H (mm), 6" View Port with Shutter

### LOAD LOCK CHAMBER

250W x 250D x 60H (mm), 5" View Port, Ball Bush Slide Unit with Bellow Seal

### ULTIMATE PRESSURE

10<sup>-7</sup> Torr Range

### SUBSTRATE FIXTURE

6" Planetary

### SUBSTRATE ROTATION

10 – 60 RPM Magnetic Ferro Seal

### SUBSTRATE HEAT

6" SiC with Max Temperature 650° C

### SUBSTRATE BIAS

RF or DC

### PROCESS CONTROL

Flexlab provides user friendly operating software with data logging, recipe builder, report generation, and remote access capabilities. 15" Touch Screen, PC Based

### POWER SUPPLY

600W RF Power Supply, 2kW DC Power Supply

### SPUTTER GUN

Four 3-inch or Three 4-inch Sputter Guns with Shutters

### PUMPING SYSTEM

Turbo Pump – 800 l/s, Rotary Pump Main – 970 l/min, Rotary Pump Load Lock – 300 l/min

### GAS DELIVERY SYSTEM

MFC - Argon, Oxygen, Nitrogen, Touch Screen MFC Readout

### PRESSURE GAUGE CONTROL

GP 307

High Pressure: Penning Gauge, Ion Gauge

Low Pressure: Pirani Gauge, Convectron Gauge

### UTILITY

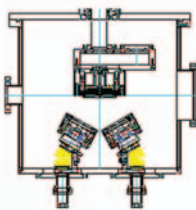
Electrical: 208/240/50Hz/60Hz/ 50kW 3-phase

Water: 20 GPM, Delta 40 PSI @ 21°C

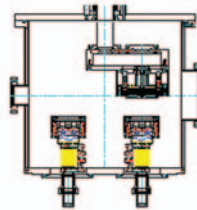
Air: Compressed air @ 85-125 PSI

### DIMENSION

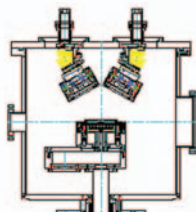
1600W x 1500D x 2200H (mm)



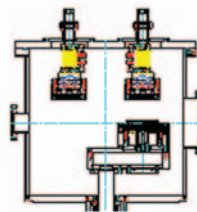
**UP-SPUTTERING  
FOR CODEPOSITION**



**UP-SPUTTERING  
FOR MULTILAYER  
DEPOSITION**



**DOWN-SPUTTERING  
FOR CODEPOSITION**



**DOWN-SPUTTERING  
FOR MULTILAYER  
DEPOSITION**