CNT
Atomic Layer Deposition

Phoenix G2 ALD System

The Phoenix G2 is a reliable, proven production platform for most thermal batch ALD processes. It is designed to be flexible, easy to use and has a number of operator interfaces. It has become one of the market's leading production ALD Systems.

Options Include:

- Integrated high capacity ozone generator
- Low vapor precursor delivery bubbler
- Glove box integration
- Automated and semi-automated loaders available

Batch Thermal ALD System for Mid-scale Production

Easy Operator Interface

Simple recipe driven GUI

Featuring

- Simple and Easy to Use Interface
- Pre-loaded Recipes for a Variety of Films, Including Nanolaminates
- Large Process Chamber (up to Gen2.5) Substrates
- Many Built in Safety Features

Phoenix G2 Technical Specifications

Substrate Size	Up to 370 mm x 470 mm (Gen 2.5 Panels)
	100mm wafers - 240 to 360
	150mm wafers - 80 to 160
	200mm wafers - 80 to 100
	300 mm wafers - up to 40
	Custom holders for other 3D objects
Dimensions (W x L x H)	900 mm x 1370 mm x 1700 mm
Cabinet	Vented Cabinet with smoke detection
Power	208 VAC 3 Phase, 8500 W (excluding pump)
Control	Windows™ PC
Substrate Temperature	Up to 285° C
Deposition Uniformity ($Al_2 0_3$)	<1.5% within wafer, <1% within batch
Vacuum Pump	Dry pump ≥350 CFM
Compatibility	Cleanroom class 100 compatible
Precursor Delivery System	Standard 4 lines accommodate solid, liquid and gas precursors and is independently heated up to 200°C
Valves	High Speed ALD valves
Precursor Cylinders	3.1 l cylinders or 600 ml
Carrier/Venting Gas	N_2 or Ar MFC flow control
Chamber Volume (L x W x H)	(50cm, 40cm, 24 cm)

OPTIONS	
LVPD	Low Vapor Pressure Delivery (Precursor Bubbler)
Ozone Generator	200 l/g
Glove box integration	Integrated to allow direct loading from within a glove box
Semi-Automatic Loader	Operator loaded cassettes
Automated Loader	Automatically loaded cassettes
SECS/GEM interface	Equipment to host data communications