

Creative Innovator for

Atomic Layer Deposition Technology

www.cn-1.co.kr

GREETING

CN1 has become the leading supplier of Atomic Layer Deposition (ALD) equipment through aggressive investments in R&D.

Our equipment designs and process technologies have been thoroughly proven and perfected over a decade of intensive development.

As a result, high-tech organizations working in the semiconductor, display, bio-tech and advanced energy industries now prefer CN1 ALD systems to meet their most demanding nanotechnology applications and production needs.

The proof is that CN1's ALD equipment is now in use at hundreds of leading Universities, Research Institutes and Companies in the United States, Japan, Singapore, Taiwan, Russia, China and Korea.

Our successes to date and our continual drive to grow as a global company demonstrate that CN1 truly "Can be the Number One".

CEO JH Jeong



ATOMIC CLASSIC

Available from 4" to 8" wafer

Thermal ALD Process



Thermal ALD Process

Laminar Gas Flow (Side Gas Flow)
Gas Delivery System: Bubbler, LDS etc.

Low Particle Generation

Small Volume for Process

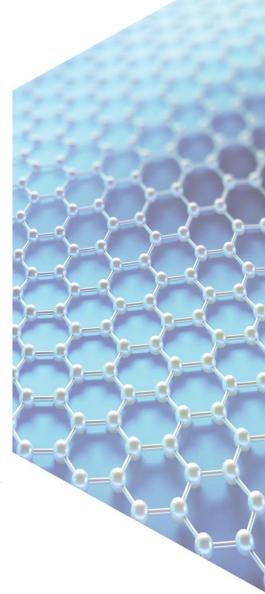
Available Laminated & Mixed Process

Easy User Interface & Maintenance

Max Temperature : 450 ℃ (@ Wafer)

No. of Precursor Canisters: Up to 4 Sets (Standard)





ATOMIC PREMIUM

Available from 4"to 12" wafer

Thermal & Plasma Enhanced ALD Process



System Specification

Substrate Size: 4 ~ 12" Standard (Wafer)

Thermal ALD Process (Plasma Process Available)

Chamber Material: Al6061 with Anodized

Gap Adjustable between Showerhead and Substrate

Gas Delivery System : Bubbler, LDS etc. Max Temperature : 500 ℃ (@ Wafer)

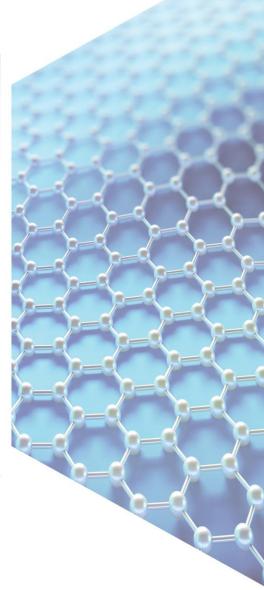
No. of Precursor Canisters : Up to 4 Sets (Standard)
Pressure Control : Automatic Control by Throttle Valve

Process Gauge: CDG Gauge (10 Torr)

Process Pump: Dry Pump (Rotary Pump Available)

Pumping Line Hot Trap to Reduce Particle





ATOMIC MEGA

Available from 4" to 12" multi wafers

Thermal ALD Process



System Specification

Vertical Furnace Type Batch ALD Substrate Size: 4" to 12" Standard wafer Product Wafer: 25EA / 50EA(up to 100EA)

Boat Slot Pitch: 10 ~ 15 mm

Boat Elevation System for Wafer Loading

Up/Down & Wafer Rotation

Manual / Automatic Wafer Transfer Furnace Heater : Zone Temp. Control

Process Temp. : $400\,^{\circ}\text{C} \sim 800\,^{\circ}\text{C}$

Ramping-Up: > 10°C/min

Ramping-Down: 2 ~ 3.3 ℃/min





ATOMIC SHELL

Thermal ALD Process

For shell coating on core structure



Dagatar Valuma : 100 ag 50

Reactor Volume : 100 cc \sim 500 cc Filter Size : Variable (0.5 μ m \sim)

Reactor Heating: Max 300 °C (Reactor Body: more than 230 °C)

Reactor Rotation : DC Motor Driver Rotation Speed : $10 \sim 60 \text{ rpm}$



ATOMIC BASIC

Simple & compact system

Thermal ALD Process



System Specification

Substrate Size: ≤6" Standard (Wafer) Compact Reactor Thermal ALD Very Small Volume for Process Easy User Interface & Maintenance Max Temperature: 300°C (@ Wafer)



