

NineScrolls LLC

Leading Innovation in Scientific Research Equipment

About NineScrolls LLC

NineScrolls LLC is a dynamic start-up company dedicated to advancing innovation and integration in the scientific research equipment industry. Our primary focus is on establishing a comprehensive platform that connects manufacturers, researchers, and industry professionals across the United States.

By fostering collaboration and streamlining access to cutting-edge laboratory equipment, we aim to empower scientific discovery and drive technological advancements. At NineScrolls LLC, we are committed to delivering tailored solutions and creating value for our partners and clients through expertise, efficiency, and innovation.

Integration

We create seamless connections between manufacturers, researchers, and industry professionals to advance scientific discovery.

Innovation

We drive advancement in the scientific equipment industry through innovative solutions and platforms.

Collaboration

We foster partnerships and facilitate connections across the scientific community to accelerate progress.

Expertise

We leverage deep industry knowledge to deliver tailored solutions that create value for our partners and clients.



Our Trusted Manufacturer Partner

We are proud to partner with Tyloong, a leading manufacturer of semiconductor processing equipment with over 30 years of experience in the industry. Their commitment to innovation and quality aligns perfectly with our mission to provide cutting-edge research equipment solutions.

30+

Years of Experience

1000+

Global Installations

300+

Research Institutions Served

Industry-leading R&D

State-of-the-art research and development capabilities driving innovation in semiconductor processing.

Global Support Network

Comprehensive technical support network ensuring reliable service worldwide.

Proven Track Record

Decades of experience and success in semiconductor manufacturing equipment.

Comprehensive Training

Detailed training programs and documentation for optimal equipment operation.

Customizable Solutions

Flexible equipment configurations tailored to specific research requirements.

RIE Etcher Series

Uni-body Design Concept

Foot-print outstanding (ref 1.0m*1.0m)

Uniform Chamber Center Pump-down

Better process performance

Showerhead Gas Feed-in

Tuned as a preset parameter dependently

Configurable Plasma Discharge Gap

Tuned as a preset parameter dependently

Cost or Performance Orientation

RF, Pump, Values etc. depending on requirements

Sample Handling Options

Open-Load or Load-Lock



Specification	Parameters
Wafer Size Range	4,6,8,12 inch or multi-wafers optional
Etching Materials	Si-Based (Si/SiO ₂ /SiN _x /SiC/Quartz etc.), Compounds (InP/GaN/GaAs/Ga ₂ O ₃ /ZnS etc.), 1D&2D Materials (MoS ₂ /BN/Graphene etc.), Metals (Au/Pt/W/Ta/Mo etc.), Failure Analysis, etc.
Vacuum	TMP&Mechanical Pump
RF Power	Full Range 300-1000W, optional
Gas System	4 lines(Standard) or customized
Wafer Cooling	Water Cooling or He Backside Cooling optional
Wafer Stage Temperature Range	From -70°C to 200°C, optional
Non-Uniformity	Less than ±5% (Edge Exclusion)



ICP Etcher Series

Uni-body Design Concept

Foot-print outstanding (ref 1.0m*1.5m)

Process Design Kits

Better process performance

Chamber Control

Chamber liner, electrode temperature control suitable for different process application

Configurable Plasma Discharge Gap

Tuned as a parameter dependently

Cost or Performance Orientation

RF, Pump, Values etc. depending on requirements

Plasma Specialization

Low power plasma technology, ion damage-free optional

Sample Handling Options

Open-Load or Load-Lock



Specification	Parameters
Wafer Size Range	4,6,8,12 inch or multi-wafers optional
Etching Materials	Si-Based (Si/SiO ₂ /SiN _x /SiC/Quartz etc.), Compounds (InP/GaN/GaAs/Ga ₂ O ₃ etc.), 2D Materials (MoS ₂ /BN/Graphene etc.), Metals (W/Ta/Mo etc.), Diamond, Failure Analysis, etc.
Vacuum	TMP&Mechanical Pump
RF Power	Source 1000-3000W, Bias 300-1000W, optional
Gas System	5 lines(Standard) and He backside cooling, or customized
Wafer Stage Temperature Range	From -70°C to 200°C, optional
Non-Uniformity	Less than ±5% (Edge Exclusion)

Stripper Series

Uni-body Design Concept

Foot-print outstanding (ref 0.8m*0.8m)

Uniform Chamber Center Pump-down

Better process performance

Uniform Gas Feed-in

Tuned as a preset parameter dependently

Configurable Plasma Discharge Gap

Tuned as a preset parameter dependently

Cost or Performance Orientation

RF, Pump, Values etc. depending on requirements

Sample Handling

Open-Load



Specification	Parameters
Wafer Size Range	4,6,8,12 inch or multi-wafers optional
Etching Materials	Organics (PR/PMMA/PS nanosphere etc.), 2D Materials (MoS2/BN/Graphene etc.), Failure Analysis, etc.
Vacuum	Mechanical pump
RF Power	Full range 300-1000W, optional
Gas System	2 lines(Standard) or customized
Wafer Cooling	Water cooling
Wafer Stage Temperature Range	From 5°C to 200°C, optional
Non-Uniformity	Less than ±5%(Edge Exclusion)

IBE/RIBE Series

Uni-body Design Concept

Foot-print outstanding (ref 1.0m*0.8m)

Maintenance and Sample-handling Friendly

Sample holder and ion source design for easy-to use

Flexible Ion Source Design

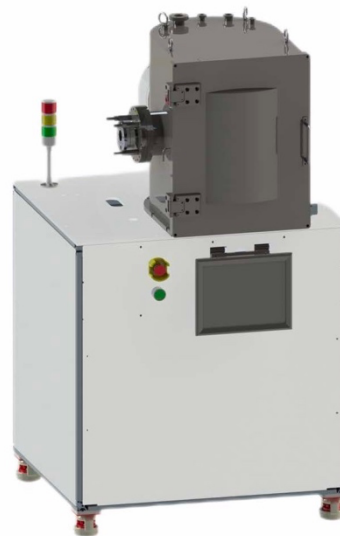
Different kinds of ion source easy-to swap design, depending on customer requirements

Cost or Performance Orientation

Ion Source, Pump, Values etc. depending on requirements

Sample Handling Options

Open-Load or Load-Lock



Specification	Kaufman ion source	RF ion Source
Wafer Size Range	up to 6 inch	up to 12 inch
Gas System	1 line(standard) or customized	3 line(standard) or customized
Wafer Stage Motion	Tilt from 0° to 90°, Rotation from 1-10 rpm/min	
Wafer Stage Cooling	From 5 to 20°C, Water cooling; He backside cooling optional	
Vacuum	TMP&Mechanical Pump	
Base Vacuum	Better than 7E-7Torr	
Non-Uniformity	Less than ±5%(Edge Exclusion)	

ALD Series

Uni-body Design Concept

Foot-print outstanding (ref 0.8m*1m)

Box-in-Box Process Chamber

Better process performance

Configurable Gas Feed-in

Showerhead gas feed-in, tuned as a preset parameter independently

High-AR Step Coverage

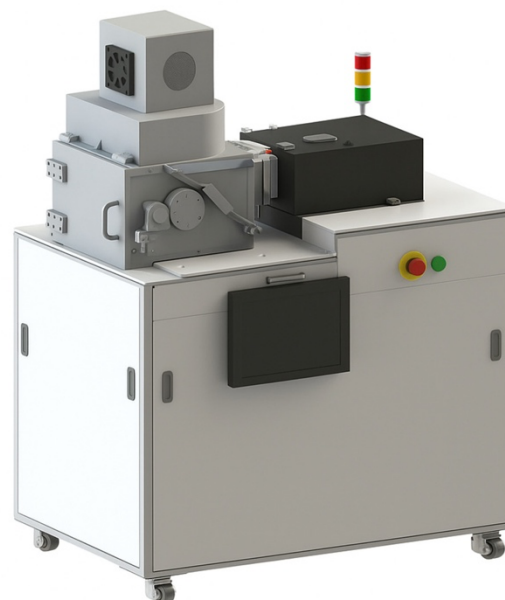
Excellent high-AR step covering capability with multiple gas inlets and vertical precursor though

Cost or Performance Orientation

RF, Pump, Values etc. depending on requirements

Sample Handling Options

Open-Load or Load-Lock



Specification	Parameters
Wafer Size Range	4,6,8,12 inch or Supersize optional
Growth Materials	Oxides (Al ₂ O ₃ /HfO ₂ /SiO ₂ /TiO ₂ /Ga ₂ O ₃ /ZnO etc.), Nitrides (TiN/TaN/SiN _x /AlN/GaN etc.), Metals (Pt/Pd/W etc.), etc.
Vacuum	TMP&Mechanical Pump
Base Vacuum	Better than 5E-5Torr
RF Power	Remote Plasma 300-1000W, optional
Number of Precursor	2-6 lines or customized
Temperature of Source	From 20°C to 150°C (Standard), 200°C optional
Wafer Temperature Range	From 20°C to 400°C, higher temperature optional
Non-Uniformity	Less than ±1%(Al ₂ O ₃)

PECVD Series

Uni-body Design Concept

Foot-print outstanding (ref 1.0m*1.0m)

Process Design Kits

Better process performance

Variable Plasma Discharge Gap

Better process performance

Temperature Control

Chamber liner, electrode temperature control
suitable for different process application

Advanced RF System

Electrode RF driven (13.56MHz and/or 400KHz)
for better process tuned and controlled, low stress

Cost or Performance Orientation

RF, Pump, Values etc. depending on requirements

Sample Handling Options

Open-Load or Load-Lock



Specification	Parameters
Wafer Size Range	4,6,8,12 inch or multi-wafers optional
Deposition Materials	Si-Based (α -Si:H/SiO ₂ /SiN _x /SiC etc.), etc.
Vacuum	Roots & Mechanical Pump
RF Power	Full Range 500-2000W, optional
Gas System	6 lines(Standard) or customized
Wafer Stage Temperature Range	From 20°C to 400°C, higher temperature optional
Non-Uniformity	Less than $\pm 5\%$ (Edge Exclusion)



HDP-CVD Series

Uni-body Design Concept

Foot-print outstanding (ref 1.0m*1.5m)

Process Design Kits

Better process performance

Temperature Control

Chamber liner, electrode temperature control suitable for different process application

Step Coverage

Excellent step covering capability, tuned as a parameter dependently

Cost or Performance Orientation

RF, Pump, Values etc. depending on requirements

Sample Handling Options

Open-Load or Load-Lock



Specification	Parameters
Wafer Size Range	4,6,8,12 inch or multi-wafers optional
Deposition Materials	Si/SiO ₂ /SiN _x /SiON/SiC, etc
Vacuum	TMP&Mechanical Pump
RF Power	Full Range: Source 1000-3000W, Bias 300-1000W, optional
Gas System	6 lines(Standard) or customized
Wafer Stage Temperature Range	From 20°C to 200°C
Non-Uniformity	Less than ±5%(Edge Exclusion)

Sputter Series

Uni-body Design Concept

Foot-print outstanding (ref 1.0m*1.7m)

Creative Magnetron Design

Magnetron target structure self-designed creatively, designed and modified base on customer depending

Flexible Target Configuration

Magnetron target face-down or face-up optional, also angle tiltable and deposition distance tunable

Advanced Electrode Control

Electrode rotational, and temperature controllable suitable for different process application

RF Bias Capability

Substrate can be RF biased for in-situ clean, also better process tuned and controlled

Cost or Performance Orientation

RF, Pump, Values etc. depending on requirements

Sample Handling Options

Open-Load or Load-Lock



Specification	Parameters
Wafer Size Range	4,6,8,12 inch or multi-wafers optional
Magnetron Sputtering Source	2-6 optional
Substrate Temperature	Water-cooling, 400°C, 800°C, 1200°C, optional
Gas System	2 lines (Standard), numbers of line customized
Power	DC or RF customized, automatic switcher
Non-Uniformity	Less than $\pm 5\%$
Pre-Cleaning	Independent chamber or in-situ, RF plasma, optional
Base Pressure	Better than $5E-7$ Torr, higher vacuum customized



Coater/Developer & Hotplate Series

Uni-body Design Concept

Foot-print outstanding (ref 1.0m*0.8m)

Flexible Configuration

Numbers of coater/developer/hotplate customized

Modular Options

Wide range of options down to module level, including dispense systems, temperature for developers etc.

Cost or Performance Orientation

Dispense, Pump, Values etc. depending on requirements

Sample Handling

Open-Load



Specification	Coater	Developer
Wafer Size Range	Small-piece,2,4,6,8,12 inch or Square optional	
Max. Spin Speed	8000 rpm ±1rpm	5000 rpm ±1rpm
Max. Acceleration	8000 rpm/s	5000 rpm/s
Dispense Arm	Up to 2 photeresist lines	Up to 2 developer lines and deionized water line
Interlock	Vacuum pressure, uncover etc.	
Hotplate Specifications		
Wafer Size Range	Small-piece,2,4,6,8,12 inch or Square optional	
Max. Temperature	Up to 200°C, Higher Temperature optional	
Lift-Pins	3 lift-Pins, minimum compatible 2 inch	



Office Location

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Business Hours

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Emergency Support:

24/7 available for critical issues

INTEGRATION

INNOVATION

COLLABORATION

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