High Purity Ptfe Wet Cleaning Flower Basket Single Wafer Etching Rack Customizable 4 Inch Mask Plate Carrier

Item Number: PL-CP66

Introduction

High-purity PTFE wet cleaning flower baskets offer exceptional chemical resistance for semiconductor wafer processing. These customizable etching racks ensure contamination-free immersion cleaning and handling for delicate substrates in demanding laboratory and industrial environments. Contact us for bespoke fluoropolymer solutions.

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Application	Description	Key Benefit
Semiconductor Wafer Cleaning	Immersion of silicon wafers in RCA clean (SC-1 and SC-2) sequences to remove organic and metallic contaminants.	Prevents cross-contamination and ensures high-purity processing.
Wet Chemical Etching	Precision etching of thin films (SiO2, Si3N4) using hydrofluoric or phosphoric acid baths at elevated temperatures.	Maintains structural integrity in aggressive acid environments.
Mask Plate Processing	Specialized handling and cleaning of photomasks used in lithography to ensure defect-free pattern transfer.	Precision slotting prevents contact-induced damage to the mask surface.
Solar Cell Fabrication	Bulk processing of silicon wafers for texturing and phosphorus silicate glass (PSG) removal.	High throughput and durability in high-volume production cycles.
Conductive Glass Prep	Cleaning and preparation of ITO/FTO coated glass for optoelectronic and display manufacturing.	Minimal contact points prevent scratching of delicate conductive layers.
MEMS Development	Handling of multi-layered micro-electromechanical systems during complex sacrificial layer etching processes.	Chemical inertness ensures that delicate microstructures are not compromised.
Lab-Scale R&D	Small-batch substrate treatment in academic and industrial research for novel material development.	Versatile customization allows for non-standard substrate shapes and sizes.

Parameter	Specification Details (Model: PL-CP66)
Material Composition	100% High-Purity Virgin PTFE (Polytetrafluoroethylene)
Maximum Operating Temp	+260°C (Continuous)
Minimum Operating Temp	-200°C
Chemical Compatibility	Universal (pH 0-14); Resistant to HF, Aqua Regia, Piranha Solution
Standard Substrate Size	4 inch (100mm) - Customizable for all diameters
Slot Configuration	Single-wafer or Multi-wafer variants available
Slot Depth/Width	Fully customizable to substrate thickness and stability needs
Handle Design	Fixed vertical, removable, or swing-style handles (Customizable)
Fabrication Method	Precision CNC Machining (Zero Molding Contamination)

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Parameter	Specification Details (Model: PL-CP66)
Surface Finish	High-smoothness, low-porosity machined finish