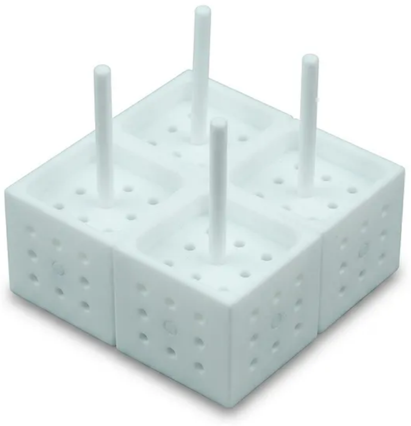
Custom Ptfe Wafer Cleaning Flower Basket Chemical Resistant Fluoropolymer Carrier For Semiconductor Etching And New Energy Processing

Item Number: PL-CP149



Introduction

Optimize your semiconductor and new energy manufacturing with custom PTFE wafer cleaning flower baskets. Engineered for extreme chemical resistance during etching and RCA cleaning, these high-purity fluoropolymer carriers ensure process integrity and long-term durability in demanding industrial environments.

Learn More

Application	Description	Key Benefit
Semiconductor RCA Cleaning	Sequential cleaning of silicon wafers using SC-1 and SC-2 solutions to remove organic and metallic contaminants.	Zero contamination and resistance to ammonia/peroxide mixtures.
Hydrofluoric Acid (HF) Etching	Removal of native oxides or controlled etching of silicon dioxide layers on wafer surfaces.	Absolute resistance to HF, which would dissolve glass or quartz alternatives.
Photovoltaic Texturing	Wet chemical etching of monocrystalline or polycrystalline silicon wafers to create light-trapping surfaces.	Consistent slot alignment ensures uniform texturing across large batches.
Piranha Solution Processing	Aggressive removal of organic residues and photoresist using sulfuric acid and hydrogen peroxide.	Withstands extreme exothermic reactions and high-temperature acidity.
Post-CMP Rinsing	Critical cleaning of wafers following chemical mechanical polishing to remove abrasive slurries.	Smooth surfaces and high drainage prevent particle re-deposition.
Compound Semiconductor Prep	Specialized cleaning of GaAs or InP wafers for advanced electronic and optoelectronic device fabrication.	Customizable slot geometry for non-standard wafer thicknesses and sizes.
Microchannel Reactor Loading	Positioning of substrates within customized reaction chambers for controlled chemical vapor or liquid phase deposition.	Tailored dimensions allow for perfect fitment in bespoke laboratory setups.
Lithography Development	Holding substrates during the developing and stripping of photoresist layers in microfabrication workflows.	Solvent resistance ensures the carrier does not degrade or outgas during the process.

Parameter	Specification Detail for PL-CP149
Model Identifier	PL-CP149 Series
Material Construction	100% Virgin High-Purity PTFE (Polytetrafluoroethylene)
Manufacturing Method	Full Custom CNC Machining
Chemical Compatibility	Universal (Acids, Bases, Solvents, Oxidizers, HF)
Operating Temperature Range	-200°C to +260°C (-328°F to +500°F)
Wafer Compatibility	Customizable for 2", 3", 4", 6", 8", 12" or non-standard sizes
Slot Configuration	Fully Customizable (Variable pitch, width, and depth)

Application	Description	Key Benefit

Parameter	Specification Detail for PL-CP149
Slot Count	Defined per customer requirement (e.g., 10, 25, 50 capacity)
Handle Design	Integrated, Detachable, or Extended (Customizable length)
Surface Finish	Smooth, low-porosity machined finish
Purity Standard	Suitable for Trace Analysis and Class 10/100 Cleanroom use
Drainage Features	Customizable bottom/side drainage ports