Custom Ptfe Semiconductor Wafer Cleaning Basket Corrosion Resistant Low Background Lab Rack

Item Number: PL-CP267

Introduction

Achieve superior purity in semiconductor manufacturing with our custom PTFE cleaning baskets. Engineered for extreme chemical resistance and low background interference, these durable racks ensure efficient wafer processing, rapid drainage, and reliable performance in critical high-purity laboratory environments.

Learn More

Application	Description	Key Benefit
RCA Cleaning Process	Used during SC-1 and SC-2 sequences to remove organic residues and metallic contaminants from silicon wafers.	Prevents re-contamination due to the ultra-pure, low-leachable material surface.
Piranha Etching	Handling wafers in a mixture of sulfuric acid and hydrogen peroxide for photoresist removal.	Exceptional resistance to aggressive oxidative environments without structural degradation.
Hydrofluoric Acid Dipping	Removing native oxide layers from silicon substrates using concentrated or buffered HF solutions.	Total immunity to HF attack, ensuring long-term equipment survival and process purity.
Post-CMP Rinsing	Cleaning wafers after Chemical Mechanical Polishing to remove slurry particles and chemicals.	Rapid drainage and non-stick properties prevent slurry particles from adhering to the basket.
Photolithography Development	Supporting substrates during the developing and stripping of photoresist layers.	High dimensional stability ensures precise alignment and handling during critical lithography steps.
Trace Analysis Preparation	Cleaning labware and containers used in ICP-MS and other high-sensitivity analytical techniques.	Extremely low background levels ensure the highest accuracy in detecting trace metallic impurities.
GaAs Wafer Processing	Handling compound semiconductor wafers through specialized etching and rinsing cycles.	Gentle support structures prevent breakage of brittle compound semiconductor materials.
Ultrasonic Cleaning	Functioning as a submerged carrier during high-frequency acoustic cleaning cycles.	Efficiently transmits ultrasonic energy while protecting wafers from mechanical contact with the tank.

Feature	Specification Details for PL-CP267
Model Identifier	PL-CP267
Primary Material	High-Purity Virgin PTFE (Polytetrafluoroethylene)
Manufacturing Process	100% Precision CNC Machined (No injection molding residues)
Chemical Resistance	Full resistance to HF, H2SO4, HNO3, HCl, KOH, and Organic Solvents
Temperature Range	-200°C to +260°C (-328°F to +500°F)
Surface Finish	Smooth, low-porosity finish to minimize particle entrapment
Configuration Options	Fully Customizable (Wafer size, slot width, slot pitch, handle design)
Wafer Compatibility	Suitable for 2", 3", 4", 6", 8", and 12" wafers or custom dimensions
Drainage Design	V-bottom or U-bottom slot profiles available for optimized fluid runoff

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Feature	**Specification Details for PL-CP267**	
Background Levels	Specifically processed for sub-ppb metallic impurity requirements	