Ptfe Circular Wafer Carrier 6 Inch Acid Alkali Resistant Semiconductor Cleaning Basket Customizable

Item Number: PL-CP207

Introduction

High-purity 6-inch PTFE circular wafer carriers designed for semiconductor cleaning. Excellent acid and alkali resistance for piranha and HF etching. Precision-machined, fully customizable baskets ensure safe substrate handling during demanding wet chemical processes, immersion baths, and ultrasonic rinsing.

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Application	Description	Key Benefit
RCA Cleaning Process	Used to remove organic residues, thin oxide layers, and ionic contamination from silicon wafers using SC-1 and SC-2 solutions.	High thermal and chemical resistance prevents carrier degradation during heated bath immersion.
Piranha Etching	Handling wafers in a mixture of sulfuric acid and hydrogen peroxide to remove heavy organic matter.	Exceptional resistance to aggressive oxidative environments ensures long equipment service life.
Hydrofluoric (HF) Acid Dips	Removal of sacrificial oxide layers or native oxides from silicon surfaces in varying concentrations of HF.	Material purity prevents the introduction of metallic ions into the sensitive etching environment.
Post-CMP Rinsing	Transporting wafers through cleaning cycles following Chemical Mechanical Polishing to remove slurry particles.	Smooth, non-stick surfaces prevent particle entrapment and facilitate effective ultrasonic cleaning.
Solar Cell Fabrication	Processing 6-inch monocrystalline or polycrystalline silicon wafers during texturing and phosphorus diffusion steps.	Robust construction supports high-volume throughput in demanding industrial production lines.
Photolithography	Supporting substrates during the developing and stripping of photoresist using solvents and specialized strippers.	Universal solvent compatibility prevents swelling or softening of the carrier frame.
Ultrasonic Cleaning	Carrying delicate components in ultrasonic or megasonic baths for high-precision contaminant removal.	Structural rigidity allows for efficient transmission of acoustic energy to the wafer surfaces.
Compound Semiconductor Etching	Processing GaAs, InP, or SiC wafers in specialized chemical mixtures for optoelectronic device manufacturing.	Customizable slot geometry accommodates varying wafer thicknesses and fragile substrate materials.

Parameter	Specification Detail for PL-CP207
Model Identifier	PL-CP207
Material Construction	High-Purity Virgin PTFE (Custom PFA options available)
Wafer Size Compatibility	6-Inch / 150mm Diameter
Geometry Configuration	Circular Cleaning Basket / Flower Basket Type
Chemical Compatibility	Universal resistance (Acids, Bases, Solvents, Oxidizers)
Temperature Tolerance	Suitable for cryogenic to high-temperature processing
Customization Capability	Fully customizable dimensions, slot counts, and handle configurations
Surface Finish	Precision-machined, ultra-smooth, non-porous
Batch Capacity	Custom designed to client specific wafer count requirements

Application	Description	Key Benefit
Parameter	**Specification Detail for PL-CP207**	
Manufacturing Method	Bespoke CNC Machining / Custom Fabrication	