

Custom Ptfе Acid Resistant Support Rack For Pfa Hydrogen Absorption Systems Multi Hole Configurations

Item Number: PL-CP25



Introduction

Optimize laboratory safety and precision with our custom PTFE support racks. Specifically engineered for PFA hydrogen absorption units, these acid-resistant frames provide superior stability and chemical inertness for demanding industrial chemical processing and trace analysis workflows in modern facilities worldwide.

[Learn More](#)

Application	Description	Key Benefit
Hydrogen Gas Scrubbing	Supporting PFA bottles used to neutralize hydrogen gas emissions in chemical reactors.	Enhanced safety through stable vessel positioning.
Trace Metal Analysis	Organization of sample digestion vessels during acid vapor absorption processes.	Zero contamination from support materials.
Semiconductor Etching	Holding ultrapure chemical containers for wet-bench etching and cleaning operations.	Absolute resistance to hydrofluoric and nitric acids.
Environmental Sampling	Securing gas-wash bottles for the collection of air pollutants in industrial exhaust monitoring.	Reliable performance in outdoor or humid environments.
Petrochemical Testing	Stabilizing reaction setups for the analysis of sulfur and nitrogen contents in fuel samples.	High thermal stability and chemical resistance.
Custom Lab Apparatus	Serving as a modular base for bespoke electrochemical cells and complex reflux devices.	Full design flexibility for non-standard setups.
Pharmaceutical Synthesis	Supporting vessels in high-purity synthesis loops where organic solvent resistance is mandatory.	Maintenance-free operation and easy sterilization.

Feature	Details and Specification Metrics for PL-CP25
Model Identification	PL-CP25 (Customizable Series)
Core Material	High-Purity Virgin PTFE (Polytetrafluoroethylene)
Secondary Material Compatibility	Optimized for PFA (Perfluoroalkoxy) Absorption Vessels
Standard Configuration	2-Hole Support Layout (Model PL-CP25-2)
Customization Range	1 to 24+ Holes (Bespoke layouts available upon request)
Hole Diameter Range	Custom machined to $\pm 0.05\text{mm}$ tolerance based on vessel specs
Acid/Alkali Resistance	Excellent (pH 0-14, including HF, Aqua Regia, and NaOH)
Thermal Operating Range	-200°C to +260°C (-328°F to +500°F)
Machining Process	5-Axis CNC Precision Milling and Turning
Tensile Strength	20-30 MPa (Material grade specific)
Water Absorption	<0.01% (ASTM D570)

Application	Description	Key Benefit
Feature	Details and Specification Metrics for PL-CP25	

Design Standard Industrial grade heavy-wall construction for maximum stability