

# Custom Ptfе Acid Resistant Support Rack Multi Hole Pfa Hydrogen Absorption System Bracket

Item Number: PL-CP378



## Introduction

Professional custom PTFE and PFA support racks specifically engineered for high-purity hydrogen absorption systems. These acid-resistant multi-hole brackets ensure superior chemical stability, gas integrity, and long-term durability in demanding industrial electrolysis, laboratory research, and fuel cell testing environments.

[Learn More](#)

Application	Description	Key Benefit
Hydrogen Fuel Cell R&D	Supporting PFA gas scrubbers to remove impurities from hydrogen feed streams before they enter the fuel cell stack.	Ensures gas purity and prevents catalyst poisoning.
Alkaline Water Electrolysis	Securely mounting absorption devices for the collection and purification of hydrogen and oxygen produced during electrolysis.	Corrosion resistance against harsh alkaline electrolytes.
Trace Metal Analysis	Housing digestion and absorption tubes in ultra-clean environments where metal contamination must be avoided.	High-purity PFA prevents leachable contaminants.
Semiconductor Etching	Organizing fluid transfer and gas absorption tubes used in the distribution of high-purity etching chemicals.	Resistance to HF and other aggressive etching agents.
Gas Scrubbing Systems	Providing a multi-hole support structure for series-connected absorption vessels in pilot plant gas cleaning operations.	Modular design allows for scalable gas processing.
Electrochemical Research	Holding electrode assemblies and absorption vessels in place during complex voltammetry or impedance spectroscopy.	Excellent electrical insulation for accurate measurement.
Environmental Monitoring	Support for gas sampling bottles and absorption tubes used in field or lab-based atmospheric pollutant analysis.	Durable construction for long-term repeatable use.

Parameter	Specification Detail (Model PL-CP378 Series)
Model Number	PL-CP378
Primary Material	High-Purity PTFE (Rack) / PFA (Absorption Vessel Compatibility)
Chemical Resistance	Universal (pH 0-14), resistant to all common acids and alkalis
Temperature Range	-200°C to +260°C (-328°F to +500°F)
Hole Configuration	Customizable (2-hole, 4-hole, 6-hole, or bespoke multi-hole arrays)
Hole Diameter	Custom machined to fit PFA vessel outer diameter (tolerances ±0.1mm)
Surface Finish	High-precision CNC finish (Ra < 0.8 µm)
Compatibility	Optimized for hydrogen absorption vessels and fluid transfer tubing
Mounting Style	Benchtop, manifold-integrated, or wall-mount (Customizable)
Customization	End-to-end CNC fabrication based on user-provided blueprints or specs