

High Purity Virgin Ptfе Square Tank Corrosion Resistant Acid Soaking Bath Custom Fluoropolymer Cleaning Vessel

Item Number: PL-CP410



Introduction

Procure high-purity virgin PTFE square tanks and acid soaking baths designed for extreme chemical resistance. Our custom-fabricated fluoropolymer vessels ensure zero contamination and superior thermal stability for demanding semiconductor and trace analysis laboratory applications. Request a bespoke quote.

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Application	Description	Key Benefit
Semiconductor Wafer Etching	Containment of hydrofluoric acid baths for the removal of oxide layers from silicon wafers.	Zero metallic contamination ensures high yield rates.
Trace Metal Analysis	Pre-cleaning and soaking of laboratory labware (beakers, vials, tubes) in concentrated nitric acid.	Ultra-low background levels for PPT-level detection accuracy.
Pharmaceutical Synthesis	Reaction vessel or storage container for highly reactive intermediate chemicals and solvents.	FDA-compliant material inertness prevents product degradation.
Aerospace Component Cleaning	Degreasing and deoxidizing of precision engine parts using aggressive chemical strippers.	Long-term resistance to harsh industrial cleaning agents.
Battery Research	Electrolyte storage and electrode soaking for advanced lithium-ion and solid-state battery testing.	Electrochemical stability ensures no interference with test data.
Electroplating & Finishing	Small-scale plating baths for precious metal deposition or anodizing processes.	Uniform thermal distribution and resistance to plating salts.
Geological Sample Digestion	Large-batch acid digestion of mineral and soil samples for geochemical exploration.	High-temperature capability speeds up the digestion process.

Feature	Specification Details (Model PL-CP410)
Core Material	High-Purity Virgin Polytetrafluoroethylene (PTFE)
Manufacturing Process	Full CNC Machining / Bespoke Fabrication
Available Model Range	PL-CP410 (Base Code for Custom Series)
Chemical Compatibility	Universal (Except molten alkali metals and specific fluorine compounds)
Operating Temperature	-200°C to +260°C (-328°F to +500°F)
Dimensional Range	Fully Customizable (Width, Length, Depth per user request)
Wall Thickness	Customizable based on volume and structural requirements
Lid Configurations	Optional: Flat Loose-Fit, Threaded, or Sealed O-ring Lids
Surface Finish	High-precision machined finish (Ra < 0.8µm available)
Optional Features	Integrated Drainage Ports, PTFE Valves, Internal Dividers, Baskets