Integrated Ptfe Overflow Tank Seamless Acid Pickling Bath Custom Fluoropolymer Semiconductor Cleaning Sink

Item Number: PL-CP388

Introduction

High-performance PTFE overflow tanks and seamless pickling baths engineered for extreme chemical resistance and high-purity applications. Fully customizable integrated designs ensure zero leakage and maximum durability in demanding industrial acid etching and semiconductor cleaning processes today for all industrial operators.

Learn More

Application	Description	Key Benefit
Semiconductor Wafer Cleaning	Critical removal of organic and inorganic contaminants from silicon wafers using RCA or piranha etches.	Ultra-high purity ensures zero trace-metal contamination.
Photovoltaic Cell Etching	Precise surface texturing of solar grade silicon using concentrated acid or alkaline solutions.	Seamless design resists the aggressive nature of texturing chemistries.
Metal Surface Pickling	High-performance removal of oxides and scales from precision metal components and medical implants.	Long-term durability reduces equipment replacement costs in corrosive environments.
Trace Analysis Labware	Preparation and storage of samples in environments where parts-per-billion (ppb) accuracy is required.	Non-leaching material prevents sample interference during analysis.
Battery Research & Development	Testing and containment of electrolytes and corrosive chemicals used in next-generation battery architectures.	Superior thermal resistance handles exothermic reactions safely.
Electroplating and Anodizing	Holding tank for specialized plating baths where high purity and chemical resistance are mandatory.	Integrated overflow maintains consistent bath levels for uniform coating.
Pharmaceutical Synthesis	Reaction vessel for the production of active pharmaceutical ingredients (APIs) involving harsh reagents.	Biologically inert material ensures compliance with strict purity standards.
Chemical Storage & Transfer	Safe containment of high-purity reagents that would degrade glass or stainless steel containers.	Robust wall construction prevents permeation and environmental contamination.

Parameter	Specification Detail for PL-CP388
Model Identifier	PL-CP388 Series
Primary Material	100% Virgin High-Purity PTFE (PFA options available)
Construction Method	Full CNC Monolithic Machining (No Welding)
Design Configuration	Integrated Inner and Outer Overflow Tank
Dimensional Range	Fully Customizable Based on Customer Specifications
Wall Thickness	Customizable (Optimized for structural integrity and thermal transfer)
Operating Temperature Range	-180°C to +260°C
Chemical Compatibility	Universal (Except molten alkali metals and elemental fluorine)
Overflow Weir Style	Custom (Straight, V-notch, or Serrated options)

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Surface Finish (Ra)	<0.5 µm (Standard) / Customizable to higher precision	
Drainage and Ports	Custom NPT, Flanged, or Compression fittings available	
Load Capacity	Engineered based on custom volume and fluid density	
Cleaning Protocol	Compatible with standard cleanroom and sterilization procedures	