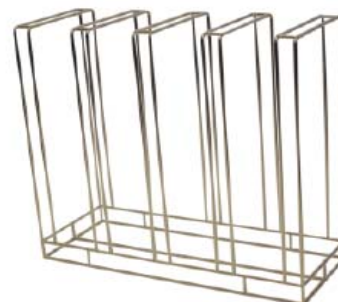


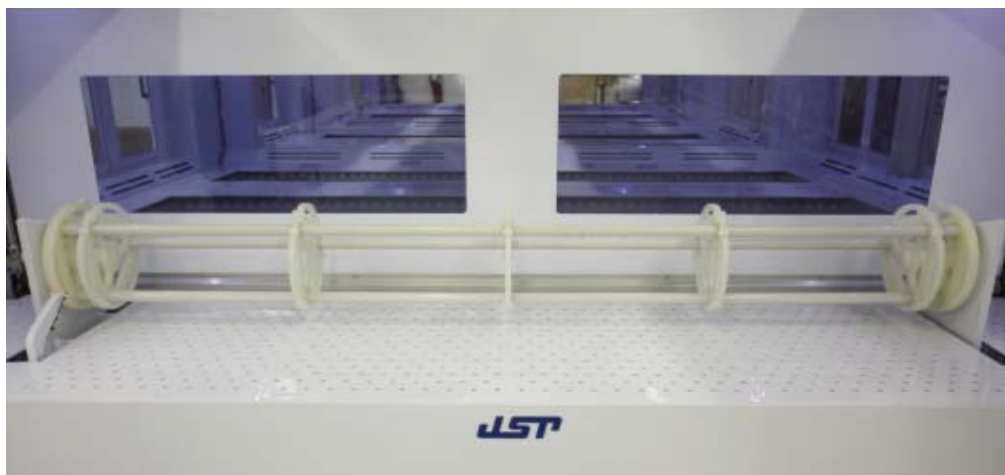
SPECIALITY RACKS & FIXTURES



JST' has over 30 years experience designing and fabricating application specific product racks and fixtures. Whether it is the Semiconductor, Aerospace, Industrial or the Medical Industry JST's in house professional design team supported with advanced manufacturing equipment and superior fabrication capabilities offer solutions to the most challenging handling constraints. Materials include exotic metals, plastics and coatings . Contact JST for information and let us help you optimize your product handling and processing.



Wet Processing and Precision Cleaning Technology



**TEFLON PLASTIC
AND/OR ECTFE
HALAR COATING ARE
JUST TWO OF MANY
OPTIONS AVAILABLE
FOR APPLICATION
SPECIFIC HANDLING
& PROCESSING**



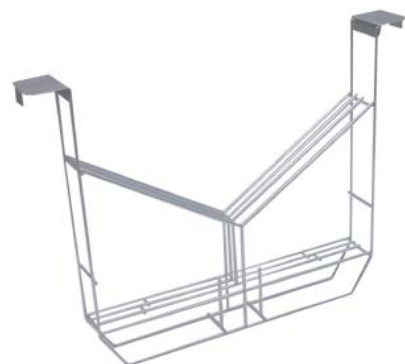
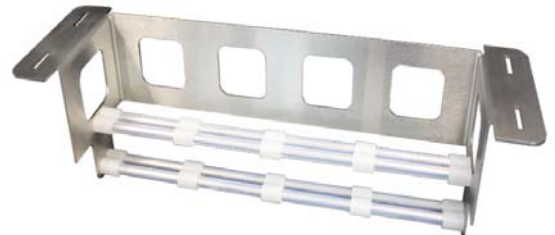
**316L STAINLESS STEEL ELECTROPOLISH
PRODUCT PROCESS FIXTURES**



Wet Processing and Precision Cleaning Technology



Application specific fixturing for your product handling and processing challenges. Rapid prototyping from engineering to solution to high throughput production cycling, JST's experience and knowledge will increase your production yield and quality with emphasis on product handling and fixture optimization.



Wet Processing and Precision Cleaning Technology



PROCESS BASKETS



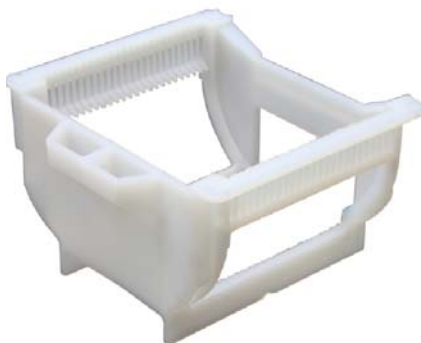
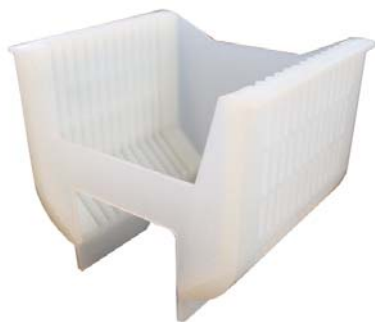
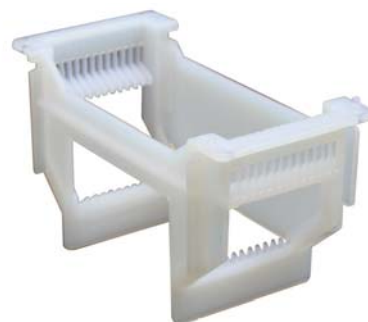
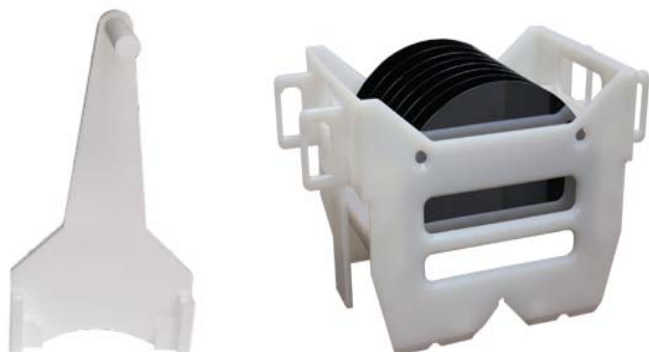
*PTFE TEFLON SHOWN FOR ACID
RESISTANT APPLICATIONS. 316L SST WITH
ELECTROPOLISH FINISH SHOWN FOR SOLVENT
APPLICATIONS.*

BEAKER PROCESS RACKS



Wet Processing and Precision Cleaning Technology

JST specializes in manufacturing process cassettes for application specific chemical process and handling requirements. Whether we are modifying an existing cassette or manufacturing them for irregular sized substrates, JST excels at rapid prototyping from conceptual design to volume production. Materials of construction range from PFA Teflon to Stainless Steel dependent on the specific application.



Wet Processing and Precision Cleaning Technology

CLEAN ROOM WIP STORAGE CABINETS



JST specializes in offering end-users with the capability to store work in process in a controlled environment. Features are provided specific to product storage requirements with emphasis on safe handling and organizational layout. Design construction of cabinet prevents contamination build up with sloped surfacing; ideal for the clean room environment.

WAFER STORAGE WITH DIVIDERS FOR PROCESS FLOW IDENTIFICATION



GENERAL STORAGE CABINET



Wet Processing and Precision Cleaning Technology



JST offers Application specific Cabinets for storage of sensitive products requiring a controlled and monitored environment.

ULTRA CLEAN PHOTOMASK STORAGE CAROUSEL



HUMIDITY PRODUCT STORAGE



Wet Processing and Precision Cleaning Technology



**e-ENCLOSURE FOR STATE OF
THE ART ELECTRONIC BEAM
LITHOGRAPHY SYSTEM INSTALLED
IN CLEAN ROOM**

**MEETS AND EXCEEDS EBEAM
ENVIRONMENTAL CONDITION
REQUIREMENTS OPTIMIZING NANO
LITHOGRAPHY PROCESSING**

FEATURES

- Vibration Isolation
- Electromagnetic Interface Cancellation and Shielding
- Temperature, and Humidity Control
- Central Control System for Environmental Condition and Tolerance Control Monitoring
- Radiant Cooling Panels for Temperature Control
- Equipment Maintenance Access are EBEAM System Specific with Removable Doors and Panels
- EMI Cancellation and Monitoring
- Leg-levelers & Seismic Anchoring



Wet Processing and Precision Cleaning Technology

CLEAN ROOM CABINETS FOR FLAMMABLE SOLVENT STORAGE



JST's Stainless Steel Exhausted Storage Cabinets are the ideal solution for the safe storage of Flammable Solvents in the clean room environment. JST's robust design features include dual wall seal welded construction with built in containment and ease of adjustment. Contact JST with your Flammable Storage requirements.

FEATURES

- Sized for Customer Specific Requirements
- Exhausted Environment
- Robust Construction
- Dual Wall Flammable Rated Construction
- Stainless Steel TIG Welded Liquid Tight Construction
- Removable & Adjustable Shelving
- Containment Tray Shelving
- Leg-levelers & Seismic Anchoring



Wet Processing and Precision Cleaning Technology

CLEAN ROOM CABINETS FOR ACID & BASE CHEMICAL STORAGE



JST's Plastic Exhausted Storage Cabinets are the ideal solution for the safe storage of Acid and Base Chemicals in the clean room environment. JST's robust design features include triple beam seal welded construction with built in containment, removable pans for a variety of container transport and easily adjustable shelving. Contact JST with your Chemical Storage requirements.

FEATURES

- Exhausted Environment
- Robust Construction 3-Bead Welds
- liquid Tight Construction
- Removable & Adjustable Shelving
- Transport Containment Trays
- Leg-levelers & Seismic Anchoring



Wet Processing and Precision Cleaning Technology

CLEAN ROOM PASS THROUGH CABINETS



JST's Pass Through Cabinets allow interlocked access to the Clean Room environment for transferring product and support materials easily and safely without contamination. Sizing, shelving and materials of construction are provided specific for your application. Contact JST to discuss your Clean Room Pass Through Cabinet requirements.

MECHANICAL DOOR INTERLOCKS PREVENT POTENTIAL CLEAN ROOM CONTAMINATION

STAINLESS STEEL OR PLASTIC MATERIAL OF CONSTRUCTION



Wet Processing and Precision Cleaning Technology

CLEAN ROOM CHEMICAL BOTTLE PASS THROUGH CABINETS



JST's Pass Through Cabinets provide an ideal solution when transferring Chemicals into the Clean Room Environment. Sizing, shelving and materials of construction are provided specific for the application. Design options include exhausting capabilities, independent door monitoring & interlocking, and safety features allowing for temporary storage of Chemical. Contact JST to discuss your Clean Room Chemical Pass Through requirements.

PLASTIC INSERT FOR ACIDS & BASES

STAINLESS STEEL INSERT FOR SOLVENTS



EASILY ADJUSTABLE & REMOVABLE SECONDARY CONTAINMENT SHELVING

EASY ACCESS WITH PARTIAL SLIDE OUT CAPABILITY

MECHANICAL DOOR INTERLOCKS PREVENT POTENTIAL CLEAN ROOM CONTAMINATION

Wet Processing and Precision Cleaning Technology



JST's straightforward Clean Room Utility Lab Sinks offer end-users with a simple ergonomic solution for utility work in the clean room environment. Additional storage options are available and the Utility Sink is customized to meet customers foot print and utility requirement.

FEATURES

- Seal welded liquid tight construction
- Slope to drain
- DI Water recirculating gooseneck and/or RO water goosenecks with flow adjustment
- Optional DI or Nitrogen Hand Sprays



Wet Processing and Precision Cleaning Technology

CLEAN ROOM WORK STATIONS



JST's Wall Mount Work Station is designed for simple clean room installation at any elevation, standing or sitting. The ideal replacement for large cumbersome catalog tables, this compact wall mounted system maximizes fab foot print. Ideal for clean room environments by eliminating "dead space" and air flow hinderance. JST offers a suite of application specific clean room work stations for all your clean room requirements. Contact JST today to discuss your application.

MAXIMIZE FAB FOOTPRINT WITH JST'S COMPACT WALL MOUNTED WORK STATION



Wet Processing and Precision Cleaning Technology

JST's Clean Room Tables are the ideal solution for specific Clean Room applications such as the Automated Lift Table shown below. The robust design construction along with a wide variety of clean room compatible materials to select from, JST offers alternative solutions to the catalog table, with the focus on Absolute Quality a trademark



Wet Processing and Precision Cleaning Technology

VIBRATION ISOLATION TABLES

JST's Vibration Isolation Tables and Work Stations are manufactured to increase the performance, reliability and accuracy of measurements and processes in Microelectronics manufacturing & inspection. In environments where contamination control and stringent cleanliness levels maintained are of equal critical importance to the limitation of vibration and shock inputs; JST's Vibration Isolation Tables designed specifically for your application are the solution.

Contact JST to discuss your application and the allowable limits of vibration and our knowledgeable team will help you determine the type of isolation system and characteristics required to reduce the environmental vibration. Whether it is a Scanning Electron microscope (SEM), atomic force microscope (AFM) or another critical measurement or alignment system, JST has the solution.

PEDESTAL FOR AFM MICROSCOPE



- Application Specific Vibration Isolation
- Constructed for Ultra Clean Environment
- Electropolish Stainless Steel Construction

OPTICAL ANALYTICAL EXPERIMENT TABLE



Wet Processing and Precision Cleaning Technology

POD STORAGE



When producing sensitive and expensive products for the Microelectronics Industry, product safety & organization is key. Contact JST today for the Clean Room Fab's most trusted manufacturer providing the most robust and quality application specific storage racks.



- Application Specific, ex Pod Storage/ WIP Racks
- Constructed for Ultra Clean Environment
- Electropolish Stainless Steel Construction



Wet Processing and Precision Cleaning Technology

Whether transporting sensitive devices, critical spare parts, Hazardous material/chemical or conducting routine equipment maintenance; JST's Clean Room Carts provide application specific transportation solutions for clean environments.

Absolute Quality -
Safe, Clean and Reliable
Clean Room Transportation



PRODUCT & SPARE PART KIT TRANSPORT



Wet Processing and Precision Cleaning Technology



Wet Processing and Precision Cleaning Technology



Wet Processing and Precision Cleaning Technology

**PRODUCT & SPARE PART
KIT TRANSPORT**



**HAZARDOUS CHEMICAL
BOTTLE TRANSPORT**



Wet Processing and Precision Cleaning Technology



Wet Processing and Precision Cleaning Technology



Wet Processing and Precision Cleaning Technology

AUTOMATED DC CLEAN ROOM LIFT CART



Whether transporting sensitive devices, critical spare parts, Hazardous material/chemical or conducting routine equipment maintenance; JST's Clean Room Carts provide application specific transportation solutions for clean environments.

Absolute Quality -
Safe, Clean and Reliable
Clean Room Transportation

55 GALLON CHEMICAL DRUM LIFT CART



Wet Processing and Precision Cleaning Technology

**DELIVERY OF
HAZARDOUS CHEMICAL**

JST's Chemical Delivery Clean Room Transport Carts include onboard holding reservoirs for the safe transport of hazardous chemical to clean room process systems. Built in safety features allow for safe reliable transfer of the chemical to the process system via N2 pressure cannister or pump. Designed for Solvent and Acid/Base applications, the JST Chemical Delivery Cart is an ideal chemical transport system for the Fab environment.

**COLLECTION OF
HAZARDOUS CHEMICAL**

JST's Chemical Collection Carts are the mobile solution for the collection and transportation of hazardous Solvents, Acid and Bases from clean room process systems to final disposal solutions. Redundant safety features including electrical grounding and the all pneumatic design promotes seamless integration into the Fab environment.

Wet Processing and Precision Cleaning Technology



Wet Processing and Precision Cleaning Technology

LAB FUME HOOD
COUNTER TOP WORK STATIONS
FOR ACID & BASE
APPLICATIONS



Wet Processing and Precision Cleaning Technology

LAB FUME HOOD COUNTER TOP WORK STATIONS FOR FLAMMABLE SOLVENT APPLICATIONS



- Exhausted Environment
- Robust Construction 3-Bead Welds
- liquid Tight Construction
- Removable & Adjustable Shelving
- Transport Containment Trays
- Leg-levelers & Seismic Anchoring



Wet Processing and Precision Cleaning Technology



OPTIONAL FEATURES

- Lower exhaust plenum with filter
- Counterbalanced front shield
- Welded in pan for work surface



Wet Processing and Precision Cleaning Technology



OPTIONAL FEATURES

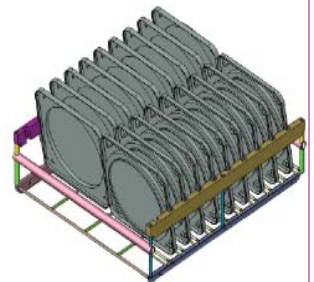
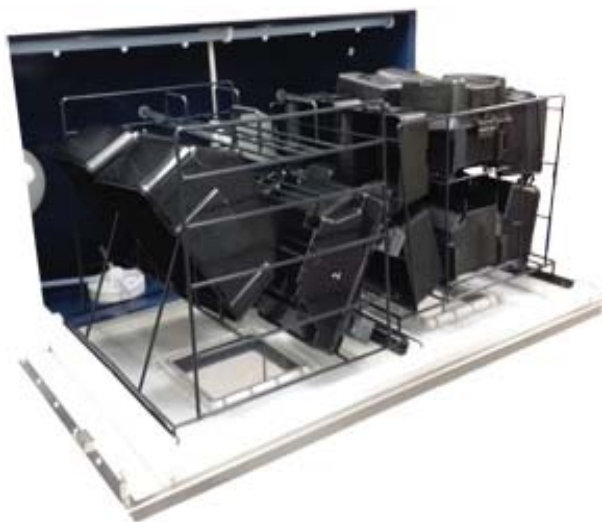
- Lower exhaust plenum with filter
- Counterbalanced front shield
- Welded in pan for work surface



Wet Processing and Precision Cleaning Technology



Wet Processing and Precision Cleaning Technology



Wet Processing and Precision Cleaning Technology