Advanced engineering and manufacturing technology for the PCB, Electronics and Metal Finishing industries worldwide

A 1024 Wet Process Systems

Precision Wet Process Systems for Printed Circuit Manufacturing

Precision Processing

With Available Phoenix Technology
Answer a range of production demands with the A1024 Wet Processing System from ASI

ASI’s next-generation A1024 System delivers precision results for small production runs, special prototype work and thin layer processing — all on one very compact, economical platform.

The sturdy A1024 delivers precision performance in a small, easy to operate package. Engineered with ASI’s advanced wet process technology, the compact A1024 platform offers total production flexibility. The system can be customized for almost any process, and when combined with the Phoenix conveyor option, lets you reliably handle razor-thin 2-mil laminates.

The standard A1024 is ideal for short run PCB operations, prototype production, research and development runs, or specialized process work. You can easily handle serious production demands for a variety of processes including develop, etch, strip and more.

A1024 Systems also offer a variety of manufacturing and control options that enhance and improve production quality and throughput. They feature “dome” glass lids for at-a-glance process monitoring and chain drives instead of gears — reducing the parts count to give you more reliable performance and low cost of ownership.

In addition, our engineering commitment to design simplicity and robust construction provides for low maintenance and high reliability, ensuring your manufacturing operation runs smoothly and efficiently.

Each component of the A1024 System has been carefully tested and engineered to satisfy our exacting production requirements. And Eidschun/ASI’s complete dedication to after-sale service and support means we’re with you from the day your equipment is delivered to the day it’s retired.

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**Patented ASI Reaction Conveyor system features:**
25” of effective spray coverage, allowing processing of large panels.
Precise digital variable speed control is provided by industrial quality DC motors

**Digital control console controls:**
pumps, heaters, conveyor, conveyor speed, temperature, and safety features

**Optional Support Table with Sump & Pump stores process chemistry during down time allowing easy wash down of process chamber and components**

**24” effective process chamber length with two-stage cascade rinsing, high impingement, self-cleaning nozzles, built-in blower driven air knives and see through “dome lids”**

**Reservoir site gauges**

1. Input module (conveyor)
2. Process module
3. Rinse module (both recirculated and fresh)
4. Output (O/TDAK) & dryer
A1024 Systems offers precision processing with a variety of options for filtration, drying, thin material processing and more.

System Options

Option 1: Support Table
The polypropylene Support Table raises the A1024 to a pass height of 36”. (Other pass heights available upon request.)

Option 2: Support Table with Sump & Pump
Featuring a 50 gallon reservoir sump, the Support Table will contain the volume of the process reservoir. The table sump is used to store process chemistry when the A1024 becomes inactive, allowing wash down of the process chamber and components. A pump and valve system is provided on the table sump to transfer the solution from the table sump back to the process chamber sump or to transfer the solution to an external drum.

Option 3: External Filtration
The filtration system is external to the machine and is in line with the flow from the chamber spray pump to the spray manifold. It provides a higher level of filtration beyond that provided by the pump inlet filter screens.

Option 4: Larger Process Pump
A larger process pump is often specified when the A1024 Developer is used to develop or strip LPI Solder Mask. The pump supplied is a 5 HP instead of the 3HP pump used on the standard system.

Option 5: Dryer Station Blow-off Upgrade
With this option, the performance of the blow-off dryer is improved by doubling the number of airknives to 4 top and 4 bottom and increasing the regenerative blower size to 2 hp.

Option 6: Enhanced High Velocity Dryer/Output
When workpiece dryness is crucial, this option should be considered. It features a polypropylene module that mates with the pass height of the A1024 when Option 1 or 2 (Support Table) is chosen. Includes: 5 HP Turbine blower, 4 slotted air knives, and recirculated air control. Temperature control is handled by filtered bleed air. A damper is provided for velocity adjustment. Sound proofing is standard.

Option 7: Resist Filter and Separator
Designed to remove photoresist from resist strip solution, this option features a modification of the process chamber to include a removable deck under the spray nozzles that directs the solution from the process area to the external filter system.

Solution enters the external filtration system and passes through a variable speed, continuously moving mesh filter belt. The filter belt separates solids from the process stream and deposits them in a removable basket. The filtered solution returns to the process chamber sump via gravity drain.

Rinse water from the recirculating rinse is also piped to the resist filter to wash the filter belt. A small diaphragm pump is provided to pump rinse water from the resist filter back to the recirculation rinse reservoir.

Option 8: Phoenix Conveyor
This option changes the standard conveyor system to the Phoenix system of inter-digitized rollers for very thin material transport. The Phoenix version of the A1024 System is identical in all other specification details except the process chamber is one inch wider.

Option 9: Containment Tray
Placing the A1024 inside this tray provides primary containment for the full volume of solution in the sump. The tray is constructed from white polypropylene (3/8 thick.) with a 3 inch lip. The tray extends beyond the A1024 envelope by about 3 inches in all directions.

Option 10: Alkaline Etch Replenishment
Alkaline etch solution is controlled by additions of concentrate to the etcher sump. The controller adds etchant replenisher into the sump based on direction from the Baume’ controller. The pH of the system is also used to define the amount of etchant replenished. The controller will work for both aqueous ammonia (standard) and optional gaseous ammonia.
A1024 Installation is easy and convenient

Installation Support
The self-contained cabinet construction of A1024 Systems facilitates fast and easy installation. Most A1024 systems are self-installed by our customers. Optional installation supervision is available if requested.

Documentation
All customers receive Eidschun/ASI documentation including:
- Utility drawings specifying all connection locations and sizes
- Footprint drawing specifying all details for facility installation preparation
- Electrical schematics
- Maintenance manual

Spare and repair parts for ASI Systems
Most parts for past models of ASI systems are available. Spare and repair parts for our new systems are in stock. Call for information.

Eidschun automatic materials handling equipment improves quality and product yields

A good quality control program requires a plan for handling, transporting and storage of work in process. All ASI Systems feature an interface for Eidschun Materials Handling Equipment that helps decrease labor costs and reduce product rejects due to excessive handling during manufacturing.

Materials handling equipment allows you to process larger volumes of panels easily and efficiently. Eidschun can provide all your materials handling needs for manufacturing rigid panels, flex panels and innerlayers.

Eidschun accumulators, rotators, loaders and unloaders are all compatible with ASI process equipment or your existing equipment. Custom equipment designs can also be produced based on your specifications.

ASI PRODUCT LINE
A3030 (Phoenix) Wet Processing Systems
A2025 Wet Processing Systems
A1024 (TT-24) Wet Processing Systems

EIDSCHUN ENGINEERING PRODUCT LINE

PCB PRODUCTS
E10 Conveyor Systems
E20 Materials Handling Conveyor Components
E30 Panel Storage & Transfer Systems
E40 Manual Process Lines
E50 Horizontal ConveyORIZED Processing Systems
E70 Loader/Unloaders: Vacuum Type
E90 Loader/Unloaders: Accumulator Type
E100 Gold Plating Equipment: Automatic Hoist
E200 Panel Plating Equipment: Automatic Hoist
E300 Metallizing Equipment: Automatic Hoist

METAL FINISHING PRODUCTS
E60 Hoist Systems
E400 Automatic Hoist Equipment: Basket Type
E500 Automatic Hoist Equipment: Rack Type
E600 Automatic Hoist Equipment: Barrel Type
E700 Anodizing Equipment: Automatic Hoist
E1000 Reel-to-Reel Equipment
E2000 Automatic Hoist Systems: Multiple Hoists
E3000 Discrete Length Continuous Process Equipment
E4000 Continuous Wire Plating Equipment
E5000 Return Type Automatic Process equipment

CYCLONE PRODUCTS
Single and Multi-Filter Chambers & Filter Elements
Stainless Steel & Plastic Vertical Pumps
Standard & Custom Fabricated Tanks
The Laidler® Self-Cleaning Nozzle
Non-metallic and Metallic Immersion Heat Exchangers
Fluid Control Products
Custom Plastic Fabrication

BUILT FOR TOMORROW’S POSSIBILITIES

EIDSCHUN /ASI

www.eidschun.com e-mail: sales@eidschun.com
5181 113th Avenue N., Clearwater, FL 33760 USA
(727) 572-9867 / Fax (727) 573-9198

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