

Develop, Etch, & Strip System

MODEL DESx124

DESCRIPTION:

The *highly efficient* Model DESx124 is the ideal solution for Automatic Chemical Developing, Etching, or Stripping of Wafers and Substrates. The *very reliable and cost effective* system utilizes proven assortment of technologies on individual or multiple media. The DESx124 can be configured with several process dispense options from Megasonic Nozzles for DI-H₂O or Chemistries; Low Pressure nozzles for Chemistry Dispenses; Heaters for Chemistries and DI-H₂O; Brush for Surface Agitation to Expedite Reactions and/or DI-H₂O, and much more. The Rapid and Effective Drying technique combines Variable Spin Speeds; optional Heated DI-H₂O; and Nitrogen Assist. The System is very safe, having a sealed and N₂ purged process chamber to minimize exposure to chemistries. It also has controllable diverter valves for directing chemistries for reuse; to chemical drains; or effluents to house drains.



DESx126 Svsstem



Example of Process Chamber with PTFE-Coated Stainless Steel Arms & Adjustable 4"x4" to 9"x9" SEMI Photomask Chuck

FEATURES:

- Up to 9" x 9" / 300mm Diameter Substrate Compatibility.
- Main Spindle Assembly having Servo Motor for precise speed control & indexing.
- Adjustable Arm Speed and Travel Positions with Arms of 316SS, with Teflon Coating if required by chemistry.
- Radially Exhausted Process Chamber for Maximum Laminar Flow with N₂ feed at located on lid.
- DI-H₂O Heater for Clean & Dry Assist.
- Process containment of chemically compatible material of Polypropylene, PVDF, or PTFE as required by chemistry.
- Stand-alone Polypropylene Cabinet.
- Microprocessor Control Capable of Retaining Thirty (30) Recipes having Thirty (30) Steps each in Memory. Number of Recipes & Steps is expandable upon request.
- Built in Safety Interlocks & Double Containment.
- User-Adjustable Timed Chamber Flush with optional Rinse to pH of entire process area & substrate with interlocks to prohibit access to process area & control Drain and Spindle Speed till safe.
- Push Button Lid Open/Close.
- Touch Screen Graphic User Interface (GUI) with Ease of Programming & Security Lockouts with On-Screen Error Reporting.
- Drain Diverter Valves for Chemical & House Drains
- Designed to SEMI S2/S8 Guidelines

OPTIONS:

- Various sizes & types of chucks for Wafers and Substrates.
- Up to Two Process Arms, having profiled oscillation for uniform application & results, including:
 - Auto Up/Down Adjustable Self Cleaning Brush Assembly for Developer, Etch, Stripper & DI-H₂O Dispenses.
 - Megasonic Nozzles for DI-H₂O or Chemical Dispense Arm.
 - Fixed or Oscillating Low Pressure Dispense with various Nozzles for DI-H₂O &/or Chemistries.
 - Atomizing Mist Nozzle Dispense
- Chemical Cabinet with Dispense Canisters, Digital Flow Meter & Pump.
- Heater for Chemical & DI-H₂O Dispenses.
- Substrate Temperature Monitoring.
- Secondary Containment with Leak Detection
- Point of Use Mixing Systems.
- FM4910 Fire Retardant Cabinet & Process Area Materials

SYSTEM DIMENSIONS:

DESx124: 29.5" wide X 27.75" deep
Heater option adds additional 7.5" to depth



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