

Develop, Etch, & Strip System

MODEL DESx128

DESCRIPTION:

The *highly efficient* Model DESx128 is the ideal solution for Automatic Chemical Developing, Etching, or Stripping of Wafers & Substrates. The *very reliable & cost-effective* system utilizes proven assortment of technologies on individual or multiple media. The DESx128 can be configured with several process dispense options from Megasonic Nozzles for DI-H₂O &/or Chemistries; Low Pressure nozzles, full or hollow Cone for Chemistry Dispenses; Heaters for Chemistries & DI-H₂O; Brush for Surface Agitation or too Expedite Reactions &/or DI-H₂O, & much more. The Rapid & Effective Drying technique combines Variable Spin Speeds; optional Heated DI-H₂O; & N₂ Assist. The System is very safe, having a sealed & 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.

FEATURES:

- Up to 9" x 9" / 300mm Diameter Substrate Compatibility.
- Main Spindle Assembly having Servo Motor for precise speed control & indexing.
- Adjustable Arm Speed & 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 with Stainless Steel frame
- 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 & 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



DESx128 System Cabinet



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

OPTIONS:

- Various sizes & types of chucks for Wafers & Substrates both on axis & off axis.
- 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:

DESx128: 28" wide X 24" deep



ULTRA Equipment Company, Inc.
41980 Christy Street, Fremont, CA 94538
sales@ultrat.com (510) 440-3900 ultrat.com