CHEMICAL CLEAN & ETCH

MODEL CESx133

DESCRIPTION:

The *highly efficient* Model CESx133 is the ideal for Cleaning & Etching of Wafers & Substrates, & is configurable for Lift-Off processes. The *very reliable* & *cost-effective* system utilizes a proven assortment of technologies on individual or multiple media. The CESx133 can be configured with several process dispense options from Brush for Sulfuric Peroxide, Surfactant, &/or DI-H₂O as well as for Surface Agitation to Expedite Reactions; Megasonic Nozzles for DI-H₂O or Chemistries; Low pressure & Mixing nozzles for chemistry dispenses; Heaters for chemistries & DI-H₂O; Nitrogen Assist & much more. The Rapid & Effective Drying technique combines Variable Spin Speeds; optional Heated DI-H₂O; & Nitrogen Assist.

FEATURES:

- System Designed for Significant Control & Safety
- Up to Four (4) Oscillating Dispense Arms
- Up to Twenty-One (21) Inches on Diagonal/Diameter or Multiples of Smaller Size Substrates.
- Main Spindle Assembly having Brushless Servo Motor for precise speed control & indexing.
- Adjustable Arm Speed & Travel Positions with Arms of Teflon Coated Stainless Steel.
- Radially Exhausted Chamber for Maximum Laminar Flow with N_2 feed at Top of the lid.
- DI-H₂O Heater for Clean & Dry Assist.
- Process containment wetted surfaces of chemically compatible material either PVDF or optional PTFE.
- Stand-alone Polypropylene Cabinet or optional (shown) Stainless Steel Frame & Skins.
- Microprocessor Control Capable of Retaining Thirty (30) Recipes having thirty (30) Steps each in Memory. Both number of Recipes & Steps are expandable upon request.
- Built in Safety Interlocks & Double Containment.
- 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



Model CESx133 System Cabinet



Example Process Chamber with 4"x4" to 14"x14" Photomask Adjustable Chuck

<u>OPTIONS</u>:

- Various sizes & types of chucks for Wafers, Photomask, & other Substrates.
- Auto Up/Down Oscillating Adjustable Self-Cleaning Brush Assembly for chemical, Surfactant, & DI-H₂O Dispenses.
- Oscillating Megasonic Nozzles & MegPies for DI-H₂O or Chemical Dispense Arm.
- Fixed or Oscillating Low Pressure Dispense with various Nozzles for DI-H₂O &/or Chemistries.
- Chemical Cabinet with Dispense Canisters, having Level Sensing, Digital Flow Meter & Pump.
- Heater for Chemical & DI-H₂O Dispenses.
- Secondary Containment with Leak Detection
- Point of Use Mixing Systems.
- FM4910 Fire Retardant Cabinet & Process Area Materials
- Chemical Recovery Systems based on multiple diverter valves, pumping to drums, & level sensing.

