DESCRIPTION: **Model CESx133**

The **highly efficient** Model CESx133 is the ideal for Cleaning and Etching Wafers, Photomask, and Substrates. The **very reliable** and **cost effective** system utilizes 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, and/or DI-H₂O as well as for Surface Agitation to Expedite Reactions; Megasonic Nozzles for DI-H₂O or Chemistries; Low pressure nozzles for chemistry dispenses; Heaters for chemistries and DI-H₂O; Nitrogen Assist 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 “Rinse to pH” before access to the substrate to minimize exposure to chemistries.

FEATURES: **CONTROL & SAFETY**

- System Designed for Significant Control & Safety
- Up to Twenty One (21) Inches on Diagonal/Diameter or Multiples of Smaller Size Substrates.
- Main Spindle Assembly having DC Brushless Servo Motor for precise speed control & indexing.
- Adjustable Arm Speed and Travel Positions with Arms of Teflon Coated Stainless Steel.
- Radially Exhausted Chamber for Maximum Laminar Flow with N₂ 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 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

OPTIONS: **UP TO FOUR OSCILLATING DISPENSE ARMS**

- Various sizes & types of chucks for Wafers, Photomask, and 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 weight Scale Dispense Canisters, 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
- Designed to SEMI S2/S8 guidelines.