**Features**

- Single Wafer Etching
- Wafer Temperature Control
- Variable Gap Spacing
- Parallel Plate Reactor
- Inductive RF Auto Tuning
- Simple and Efficient Design

**Applications:**

1. Contact Etch
2. Planarization
3. Via Etch
4. Trench Mask Etch
5. Pad Etch

**Benefits:**

- Individual Wafer Etch for Repeatable Results
- Reduced Loading Effects
- Profile Control
- Extended Over Etch Capable
- End Point Detector
- Wide Process Window
- Proven Oxide Etch Technology
- Fast, Accurate RF Tuning for Precise Etch Rate Control
- Reduced Defect Densities
- Ease of Maintenance
- Low Cost Of Ownership

---

The Lam Research Rainbow 4520 Standalone System is a single wafer, vacuum load-locked low pressure oxide etch system for etching 0.5um Contact holes at aspect ratios of <4:1. This system features a low pressure main chamber for anisotropic etching of dielectric films with low conductance manifold, pick and place wafer transport system with non-wafer contact optical alignment, flat or notch orientation and active temperature control of upper and lower electrodes. The process makes use of a low polymer forming chemistry for high selectivity to polysilicon. The system can also include a Monochromator for automatic endpoint on exposed oxide.

SemiGroup offers a complete array of options and expertise when supplying Plasma Etch Equipment to our clients. We also provide Total Refurbishment Services for your existing Plasma Etch Equipment. We will refurbish all assemblies, clean and re-range all your Mass Flow Controllers, recondition all chambers and load locks, replace all o-rings and seals to return the equipment to original OEM Specifications. Your machine will go through a rigorous Plasma "On" Wafer Marathon to ensure complete functionality before we ship your tool. Any required peripheral equipment will now also be fully checked out (Pumps, Chillers, RF Carts, Cabling etc) before being shipped.

Finally Semigroup will Startup and Install your newly refurbished etcher completing our "Turn-Key" Premium Client Service. We also have our own line of consumable parts we will supply with your newly refurbished tool.