

AutoEtch 490



The AutoEtch 490 is a versatile tool capable of meeting a wide range of etch requirements it accommodates chlorine and Freon chemistries.

Applications

- ◆ Polysilicon
- ◆ Silicon Nitride
- ◆ Refractory metal silicides
- ◆ Thin dielectrics

Typical Results

Cl/He polysilicon etch

- ◆ ME Etch rate $\geq 3500\text{Å}/\text{min}$
- ◆ Uniformity $\pm 15\%$ 3σ
- ◆ Profile control 85-90 degree
- ◆ Poly to oxide selectivity $>20:1$
- ◆ Poly to resist selectivity 2:1

Typical Results

SF₆/He isotropic polysilicon etch

- ◆ ME Etch rate 6000-12000Å/min
- ◆ Uniformity $\pm 15\%$ 3σ
- ◆ 0.5 μm undercut
- ◆ Poly to oxide selectivity $>15:1$
- ◆ Poly to resist selectivity 5:1

Typical Results

SF₆/He sloped Nitride etch

- ◆ ME Etch rate $\geq 1800\text{Å}/\text{min}$
- ◆ Uniformity $\pm 15\%$ 3σ
- ◆ Nitride to oxide selectivity $>2:1$
- ◆ Nitride to resist selectivity 0.4 to 1.1

Typical Results

SF₆/He Nitride etch

- ◆ ME Etch rate 1000-2000 Å/min
- ◆ Uniformity $\pm 15\%$ 3σ
- ◆ Nitride to oxide selectivity 4:1
- ◆ Nitride to resist selectivity 1:1