# Micro Ilon RIE

### **Features and Benefits**

**The micro llon** is build around an anodized aluminum cabinet with a side-mounted reaction stainless steel chamber.

All other components are mounted within this cabinet with the ex-

ception of the vacuum pump which is located

externally.

#### **Process Chamber/Substrate Assembly**

The Micro IIon RIE process chamber is capable of processing one 150mm or custom IC packages. The platen can be either heated or cooled through a temperature controlled water liquid source.



Process gases, and RF power set point, are set, and monitored ,and controlled by the integrated touch screen control panel GUI. All gasses and RF power can be independently controlled during Manual, or recipe process control..

#### 1.3.5 Gas Inlet Control System

The Micro IIon RIE system standard configuration has two channels Rotameter flow meters, optionally up to a total of three channels can be ordered. All gas channels are isolated with stainless steel process isolation gas valves.

#### 1.3.6 RF Generator Sources

The system includes a 300 watt 30 kHz power supply for plasma

## **Applications**

- FAILURE ANALYSIS, DE-ENCAPSULATION
- ETCHING OF OXIDES, SILICON, NITRIDES, POLYIMIDES
- Typical process gases O2, Ar, He, CF4, SF6 and SF6

# **Specifications: Micro Ilon RIE Plasma System**

Enclosure Dimensions	W x D x H – Footprint	W x D x H – Footprint L 673mm D 220.00 mm W 215.00mm
	Net Weight	27.2155 kg 60 pounds
Chamber		6" Powered Working Area 152 mm Diameter (6.0 in. Diameter)
Electrode	Electrode Height	12.7 mm (0.5 in.)
RF Power	Standard Wattage	Standard Wattage 300 watts
	Frequency	30 kHz
Gas Control	Maximum Number of rota- meters	3
Control & Interface	Software Control	Windows10, PLC I/O with 7 inch Touch Screen
Vacuum Pump		Standard Pump CFM 20 cfm (not included)
Facilities	Process Gas Fitting Size & Type	6.35 mm (0.25 in.) OD Swagelok Tube
	Process Gas Purity	Lab or Electronic Grade
	Process Gas Pressure	0.69 bar (10 psig) min. to 1.03 bar (15 psig) max.
	Vent Gas	Purge Gas Fitting Size & Type 6.35 mm (0.25 in.) OD Swagelok Tube
	Purity	Lab or Electronic Grade
	Vent Gas Pressure	0.69 bar (10 psig) min. to 1.03 bar (15 psig) max.
Exhaust	Exhaust	KF 25 1.57mm
Facilities Equipment	Facilities	Chiller, Scrubber

For more information contact us at sales@semistarcorp.com or semistarcorp.com/product/micro-iion-rie-reactive-ion-etching