



YES-CV200RF Plasma Strip/Descum System

*Powerful Cleaning Removes Photoresist, Polyimide and BCB;
With Gentle Descum Function*

Specifications

Hardware	
Clean Room Compatibility	Class 10
Wafer Temperature Range	Ambient to 250 °C; 4 min. maximum ramp time
Capacity	Single Wafer, 2 inch, 3 inch, 100mm, 125mm, 150mm, 200mm Automatic cassette-to-cassette loading for all wafer sizes (Multiple, smaller substrates can be accommodated on the 200mm hot plate by special order) Tool can be configured with one to three independent process chambers (1 standard, 2 or 3 optional) Wafer handling robot for automatic loading & unloading
N ₂ Flow Rate	1.7 SCFM
Process Gas Flow Rate	20-50 SCCM average
Process Gas Connections	4 process gases & vent gas standard 4 Mass Flow Controllers (MFCs) for flow rate control of process gases (1 MFC Standard, 2-4 optional) Vent gas flow turbulence inside the chamber is limited by a surge control valve assembly
Interior Chamber Dimensions	25.4 cm (W) x 28.575 cm (D) x 4.978 cm (H) (10" x 11.25" x 1.96")
Hot Plate Process Area	49 in ² maximum (200mm wafer)
Hot Plate Temperature Range	Ambient to 250°C Gas cooling
Overall System Dimensions	1 chamber: 56" (142.2 cm) H x 47" (119.3 cm) W x 38.375" (97.47 cm) D 2 chambers: 63.5" (161.2 cm) H x 47" (119.3 cm) W x 38.375" (97.47 cm) D 3 chambers: 71" (180.3 cm) H x 47" (119.3 cm) W x 38.375" (97.47 cm) D (not including light tower)
Materials Exposed to the Process	Aluminum 6061-T6-Chamber, Hot Plate, Vacuum Line Alumina-Electrode Insulator Simriz® Rubber - Chamber Door Seals 316 Stainless Steel Process Gas Tubing & Vacuum Line
Chamber Material	6061-T6 aluminum
Compliance	SEMI S2, CE, S8
Software	
Tool Control	PLC control of valves, temperature set points, plasma generation power, auto operation, touch screen interface
Number of Recipes	12 user-definable recipes
Range of Exposure Time	0-1200 seconds (20 minutes)
Resolution of Timer Setting	1 second
Performance	
RF Plasma Power	40 kHz, 100 – 1000 W capacitive, downstream
Process Pressure Measurement & Control	Convection type pressure sensor, 0.1 mTorr to 1000 Torr, to control chamber venting. 10 Torr capacitance diaphragm gauge (CDG) for process pressure measurement and control
Vent Gas Consumption	0 SCF idle, 1.0 SCF peak, .44 SCF average
Reactant Gas Consumption	0 SCF idle, 4.2 x 10 ⁻³ peak and average
Heat Emission	920 watts average
Plasma Generation Power	150 watts to 1000 watts, 40 kHz, 550VAC maximum
Power Consumption with Pump	420W idle, 2100W peak, 1210W average
Strip Rate	Up to 7,000 Angstroms per minute
Electron Shift	< 10mV electron shift in a 200Å gate oxide variable plasma intensity
Uniformity (in wafer)	<10%
Cooling	Process chamber(s) cooled by customer-provided water supply Temperature range from 8° to 20°C
Additional	
Electrical Requirements	Domestic: 200-250 VAC, Single Phase, 50-60 Hz, 3 wire (2 lines and safety ground) 1 chamber: 30 amps, 2 chambers: 50 amps, 3 chambers: 70 amps European: 200-250 VAC, Single Phase, 50-60 Hz, 3 wire (line, neutral, and safety ground) 1 chamber: 30 amps, 2 chambers: 50 amps, 3 chambers: 70 amps Disconnect Interrupt: 10000 AIC
System Weight	1 chamber: 435.5 kg (960 lbs) 2 chambers: 503.5 kg (1110 lbs) 3 chambers: 571.5 kg (1260 lbs)



Contact Us

When you're ready to run process tests, a demonstration can be arranged using your chemicals and samples. Call +1 925-373-8353 (worldwide), 1-888-YES-3637 (US toll free), or visit us online at www.yieldengineering.com.

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