Plasma Cleaner (Parallel Electrode)

RIE and DP

V1000/V1000XS

High-frequency Output	1,000W V1000	1,000~2000W 1000XS

Stage size	280×280mm V1000	400×375mm V1000XS

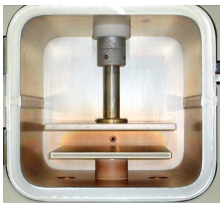
Purpose : Removal of Organic films, Surface cleaning, Surface reforming, Surface etching etc.

V1000 V1000 V1000XS

Control Display

Programmable control (touch panel)

Chamber V1000



Specifications

	Product code	328212	328214
	Model	**V1000**	**V1000XS**
	Plasma Mode	RIE and DP	
Main Unit	Electrode structure	Parallel flat stage plate	Parallel flat stage plate (Multi)
	Stage size	W280mm×D280mm	W400mm×D375mm
	Chamber size	W400mm×D400mm×H380mm	W600mm×D554mm×H440mm
	Vacuum gauge	Capacitance manometer	
	Reaction gas system	Two systems	
	Controller	Programmable	
	Display	Programmable terminal (touch panel)	
Radio-Frequency Power Supply	Radio-frequency output power	1,000W	1,000～2,000W
	Reference oscillator	Quartz oscillator	
	Oscillating frequency	13.56 MHz	
	Matching adjustment	Automatic tuning	
Discharge System (Vacuum Pump)	Displacement	1,000L/min.	1,000 & 1,500L/min.
	Inlet configuration	NW40 with a flexible stainless steel hose (1 meter long)	
	Outlet configuration	NW40	
Gas Systems	Purge gas	Nitrogen (N_2) and a regulator (3 kgf/cm²) with a manometer	
	Driving gas	Air or nitrogen (N_2) and a regulator (alarm contact at 10 kgf/cm²) with a manometer	
	Reaction gas G1	Oxygen (O_2) and a mass flow controller (1000 secm)	
	Reaction gas G2	Argon (Ar) and a mass flow controller (100 secm)	
Safety Mechanisms	System Protections	Oscillator protection circuit, Front-door interlock switch (interlocked with the startup), Safety switches (interlock switch on the side panels), Vacuum leak test function, Air-purge end buzzer, Alarm buzzer, Emergency stop push-button switch	
	Actions against vacuum pump trouble	Plasma scrubber takes the counteractions listed and show an alarm message on its display when something wrong happens to the vacuum pump. ●main valve closes ●gas feed valve closes ●isolation valve closes ●oscillator stops outputting ●treatment process is suspended ●alarm buzzer starts sounding ●alarm indicator lamp lights up ●treatment process timer stops	
Required Utilities: Power (50/60Hz)	Main unit with vacuum pump	AC220V~AC415V Three phase with step-down transformer (with an accessory power cable of 3 meters long, and exposed crimp-style terminals of 8 millimeters long)	
Required Utilities: Gases	Driving gas	Air or nitrogen (N_2) (Feed pressure: 5 to 7 kgf/cm²)	
	Purge gas	Nitrogen (N_2) (Feed pressure: 2 to 7 kgf/cm²)	
	Reaction gas G1	Oxygen (O_2) (Feed pressure: 1.5 kgf/cm²)	
	Reaction gas G2	Argon (Ar) (Feed pressure: 1.5 kgf/cm²)	
	Connection port	1/4" swagelok joint bulkhead union (SS-400-61)	
		Note: Pressure regulators, filters and other protective devices shall be prepared by others.	
Connection Diameter of the Discharge Duct (and Inlet Port)	Vacuum pump's inlet port	NW40 (with a flexible stainless steel hose of 1 meter long)	
	Vacuum pump's outlet port	NW40	
	Main unit's ozone outlet port	163mm diameter	
	Oscillator's ventilation port	163mm diameter	
		Note: Every port has a connector designed for a flexible hose. Connect a duct to these inlet and outlet ports.	