

TropoSPHERE™ Plasma System

Features and Benefits

- Dual cassette load stations to minimize idle time
- Multi-size capable aligner with minimal hardware change-over required
- Robust robotic wafer engine
- Integrated wafer recognition for high reliability wafer handling
- Compact design minimizes floor space
- Unique kits allow fast change-over between wafer sizes and supports multi-load for smaller wafer sizes
- Highly uniform treatment and fast throughput



Superior Plasma Technology for High Throughput Wafer Processing

Wafer Cleaning

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Wafer Etching

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Application

High Throughput Processing

Specifications: TropoSPHERE™ Plasma System

Enclosure Dimensions	W x D x H – Footprint	1094W x 1170D x 1700H mm (10.3W x 46D x 63H in.) 1094W x 1170D x 2185H mm (10.3W x 46D x 86H in.) with wafer loading doors open
	Net Weight	295kg (650lbs)
	Effective Footprint – Clearances	Right, Left, Back - 153mm (6 in.), Front - 914mm (36 in.) min.
Chamber	Volume	5.5 liters (338 cubic inches)
	Variable Configuration	75mm, 100mm, 150mm and 200mm Substrate Sizes
Electrodes	Powered Electrode Dimensions	305W x 305D mm 12W x 12D in.
RF Power	Standard Wattage	600W
	Frequency	13.56 MHz
Gas Control	Maximum Number of MFCs	4
Control System	Interface	PLC with PC Based Touch Screen Interface
Remote Interface	Communications	SMEMA, SECS/GEM, Remote HMI
Vacuum Pump	Dry Vacuum Pump	16 CFM, Variable Frequency Drive
Facilities	Power Supply	220 VAC, 20 A, 50/60Hz, Single Phase, 12 AWG, 3-Wire
	Process Gas Fitting Size & Type	.25-in. OD Swagelok Compression
	Process Gas Purity	Industrial grade or better
	Process Gas Pressure	Regulated from .69 bar (10 psig) min. to 1.4 bar (20 psig) max.
	Purge Gas Fitting Size & Type	.25-in. OD Swagelok Compression
	Purge Gas Purity	Industrial grade Nitrogen or CDA
	Purge Gas Pressure	Regulated from 5.5 bar (80 psig) min. to 6.9 bar (100 psig) max.
	Pneumatic Valves Fitting Size & Type	.25-in. OD Swagelok Compression
	Pneumatic Gas Purity	CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron
	Pneumatic Gas Pressure	Regulated from 5.5 bar (80 psig) min. to 6.9 bar (100 psig) max.
	Vacuum Source	-40 kPa (-5.8 psi)
Exhaust	25.4 mm (1 in.) OD Pipe Flange	
Compliance	Certifications	CE Marked, SEMI S2/S8 (EH&S/Ergonomics)
Ancillary Equipment	Nitrogen Generator (option)	Necessary for Purge Gas Requirements
	Chiller (option)	Required When Configured with Cooled Electrode
	Hydrogen Kit (option)	Allows System to Use Hydrogen Gas for Processing
	Scrubber (option)	Intended for Fluorinated Operations on the System
Shipping	Gross Weight	445 kg (979 lbs)
	Number of Packages	1
	Packing Conforms to ISPM 15	Yes

For more information, speak with your local representative or contact your regional office.

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