

# MaxVIA™ Plasma System

Uniform PCB Treatment

## Features and Benefits

- **High throughput of HDI, flexible and rigid panels for maximum production flexibility**
- **Accommodates larger panel sizes within a small footprint to consume minimal floor space**
- **Faster units per hour (UPH) processing to meet today's demanding manufacturing schedules**
- **Low CF4 gas consumption for desmear applications contributes to the lowest cost of ownership in its class**
- **Patented system technologies produce superior process uniformity at high throughputs**

## Superior Plasma Uniformity for High Throughput PCB Treatment

Nordson MARCH's MaxVIA System is specifically configured to meet the demands of today's high throughput PCB manufacturing operations. Plasma treatment uniformity is a key operational feature in desmear and etchback applications for HDI, flexible and rigid circuit board manufacturing technologies. The MaxVIA system delivers!

The MaxVIA system platform is completely self-contained, requiring minimal floor space. The vacuum system, plasma chamber, control electronics, and 40 kHz power supply are housed in a single enclosure. Full front and rear access allows for convenient service to all interior components. The pump is positioned on rollers for easy removal. No side access is required allowing for even greater floor space savings.

## Application Specific Technology

The MaxVIA system incorporates the best of Nordson MARCH's market leading technology combined with novel application specific technology development based on our greater than 25 years of experience. Through extensive research



and development, the MaxVIA system presents unique vacuum and gas flow technology, new electrode designs, and superior temperature management. The careful balance of these critical design elements and process recipe parameters delivers a system that creates the most uniform PCB treatment for key applications like desmear and landing pad cleaning.

The MaxVIA system's superior performance capabilities are complemented by very attractive low-cost-of-ownership aspects. The system features a very compact and service-friendly design. The vertical loading concept and the use of easy loading carts minimizes any idle time which generates high levels of productivity. The fast vacuum pump down and greatly enhanced process cycle times further add to the throughput and productivity of the system.

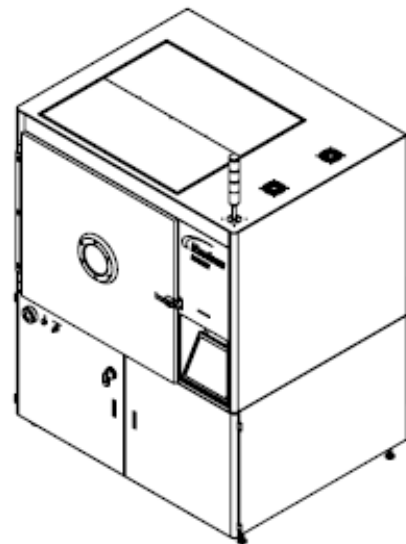
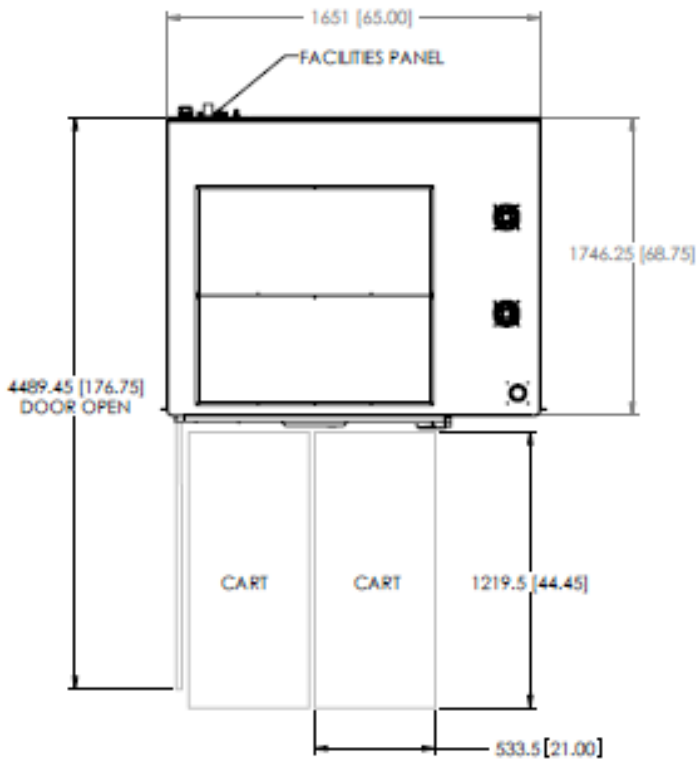
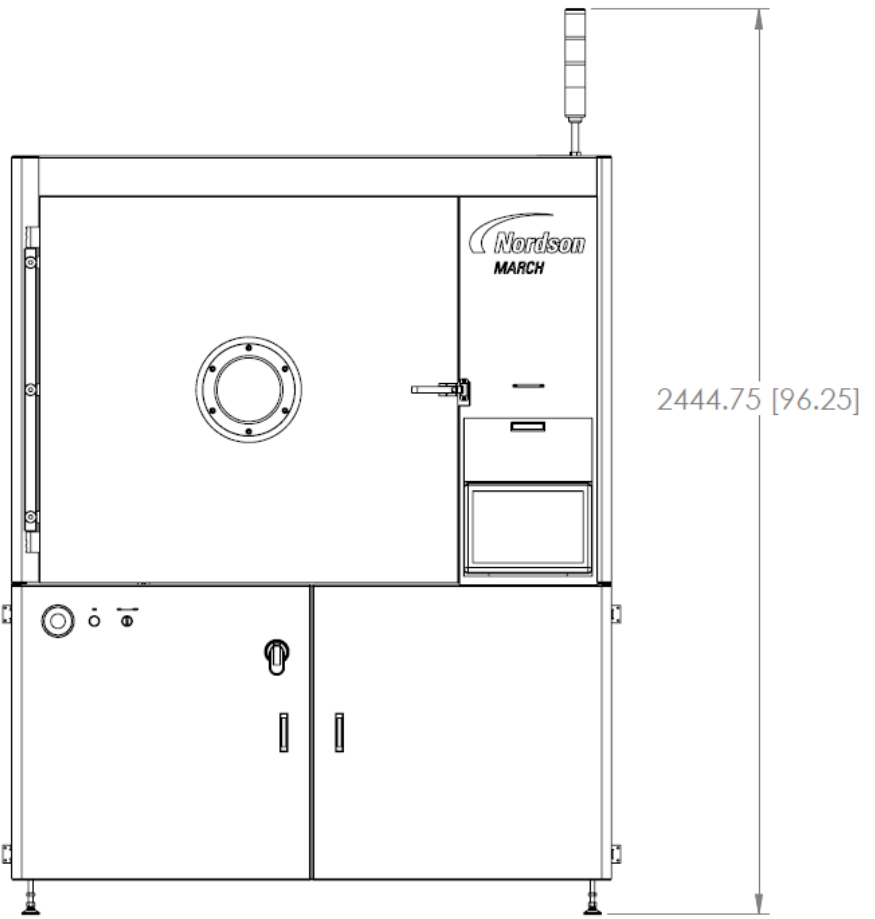
Equipped with a touch-screen PC Operator Interface, the MaxVIA system provides a wide breadth of control capability and data collection. Unlimited recipes can be stored for easy switching of plasma processes from batch to batch. Password protection ensures that no unauthorized entries can be made.



## Specifications: MaxVIA Plasma System

<b>Enclosure Dimensions</b>	<b>W x D x H – Footprint</b>	1651W x 1746.25D x 2444.75H mm (65W x 68.75D x 96.25H in.)
	<b>Net Weight</b>	2230kg (4907lbs)
	<b>Effective Footprint – Clearances</b>	1651W x 4489.45D mm with Door Open (65W x 176.75D in.)
<b>Chamber</b>	<b>Dimensions</b>	1003.3W x 1270D x 914.4H mm (39.5W x 50D x 36H in.)
	<b>Number of Available Cells</b>	13
<b>Electrodes</b>	<b>Powered Electrode Dimensions - Working Area</b>	1117.6D x 609.6H mm; (44D x 24H in.)
	<b>Temperature Controlled Electrode</b>	Standard
<b>RF Power</b>	<b>Standard Wattage</b>	10 kW
	<b>Frequency</b>	40 kHz
<b>Gas Control</b>	<b>Standard Sizes, Others Available on Request</b>	Standard – 5slm, 2slm, 0.5slm Option – 2slm, 2slm
	<b>Maximum Number of MFCs</b>	5
<b>Control System</b>	<b>Interface</b>	PLC with PC-Based Touch Screen Interface
<b>Vacuum Pump</b>	<b>Standard Dry Pump</b>	63 cfm
	<b>Water Flow</b>	5 slm
	<b>N2 Flow</b>	17 slm
	<b>Standard Booster Pump</b>	1300 cfm
<b>Facilities</b>	<b>Power Supply</b>	208 VAC, 50 A, 3 Phase + Ground; 50/60 Hz
	<b>Process Gas Fitting Size &amp; Type</b>	6.35mm (1/4 in.) Swagelok
	<b>Process Gas Purity</b>	CF4 = 99.97%; O2 = 99.996%; N2 = 99.99%; Ar = 99.999%; H2 = 99.999%
	<b>Process Gas Pressure</b>	15-20 psig
	<b>Purge Gas Fitting Size &amp; Type</b>	6.35mm (1/4 in.) Swagelok
	<b>Purge Gas Purity</b>	N2 = 99.99%
	<b>Purge Gas Pressure</b>	15-20 psig
	<b>Pneumatic Valves Fitting Size &amp; Type</b>	6.35mm (1/4 in.) Swagelok
	<b>Pneumatic Gas Purity</b>	Clean and Dry (CDA)
	<b>Pneumatic Gas Pressure</b>	80-100 psig
<b>Exhaust</b>	NW 40 @ Utility Panel	
<b>Compliance</b>	<b>CE Marked</b>	Yes
<b>Ancillary Equipment</b>	<b>Nitrogen Generator (option)</b>	80-100 psig 5.3 scfm CDA 6.35mm (1/4 in.) fitting
	<b>Chiller (option)</b>	70,000 BTU, 208 VAC, 3 Phase 35-50 Amp, 50/60 Hz
	<b>Scrubber (option)</b>	120 VAC, 38.1mm (1.5 in.) hose input, 50.8mm (2 in.) output
<b>Shipping</b>	<b>Crate Dimensions</b>	Machine = 2082.8 x 1981.2 x 2336.8mm (82 x 78 x 92 in.) Pump = 1244.6 x 1244.6 x 1371.6mm (49 x 49 x 54 in.) Carts/Racks = 1422.4 x 1295.4 x 2082.8mm (56 x 51 x 82 in.)
	<b>Gross Weight</b>	3148kg (6925.7lbs)
	<b>Number of Packages</b>	3
	<b>Packing Conforms to ISPM 15</b>	Yes

# Nordson MARCH MaxVIA Plasma System Footprint Drawings



## MaxVIA Panel Size and Throughput Chart

Panel Size (mm)	Panel Size (inches)	# Units per Cycle	Units Per Hour (UPH)
500 x 350	19.69 x 13.78	39	138
533 x 609	21 x 24	26	92
510 x 535	20 x 21	26	92
305 x 455	12 x 18	39	138
455 x 610	18 x 24	26	92



Nordson MARCH MaxVIA Plasma System with optional cart/rack

For more information,  
speak with your local  
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