AP-300 Plasma System

Bench-Top Plasma Treatment

Features and Benefits

- Touch screen control and graphical user interface give real-time process information
- Flexible shelf architecture allows processing of a wide variety of piece parts, components or carriers
- 13.56 MHz RF generator with automatic matching network delivers excellent process repeatability
- Convenient facility hook-ups for periodic calibration requirements used in validation processes



State-of-the-art plasma treatment in a compact, bench-top configuration

The AP-300 plasma system from Nordson MARCH is designed to deliver exceptionally uniform plasma cleaning and treatment with unmatched ease of operation, reliability and low cost.

The AP-300 plasma system is completely self-contained, requiring minimal bench space. The system chassis houses the plasma chamber, control electronics, 13.56 MHz RF generator, and the automatic matching network (only the vacuum pump is external to the system). Maintenance access is provided through an interlocked door or removable panels.

The plasma chamber is constructed of high-quality aluminum with aluminum fixtures for superior durability. The plasma chamber supports up to 7 removable and adjustable powered or grounded

shelves to accommodate a wide range of pieceparts, components, and part carriers including magazines, trays, and boats.

Plasma cleaning, surface activation and adhesion improvement

The AP-300 plasma system is suitable for a wide variety of plasma cleaning, surface activation and adhesion improvement applications. These capabilities are used for semiconductor manufacturing, microelectronic packaging and assembly, and by manufacturers of medical and life science devices.

The AP-300 plasma system can accommodate a wide range of process gases including argon, oxygen, hydrogen, helium, and fluorinated gases. The system comes standard with two electronic mass flow controllers for optimal gas control, with another two available optionally (four total max.).



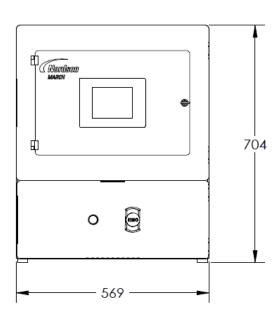
Specifications: AP-300 Plasma System

Dimensions	Enclosure	W x D x H – Footprint	569 W x 869 D x 704 H mm
Net Weight Effective Footprint - Clearances Right, Left, Front - 569 mm (23 in.), Back - 254 mm (10 in.)		w x B x II Tootpillit	
Effective Footprint - Clearances	Difficusions	Net Weight	,
Chamber Volume 267 W x 465 D x 267 H mm (10.5 W x 18.3 D x 10.5 H in.) Volume Variable Electrode Configurations Number of Shelf Positions Shelf Pitch 25.4 mm (1 in.) Electrodes Powered Electrode Dimensions - Working Area Ground (Perf.) Electrode Dimensions - Working Area Floating Shelf Dimensions - Working Area Floating Shelf Dimensions - Working Area Standard Watage Standard Watage Standard Watage Standard Watage Standard Waximum Number of MFCs 190 W x 330 D mm (7.5 W x 13 D in.) Gas Control Control Control Pystem Maximum Number of MFCs 4 4 Control PlasmaLINK; ProcessLINK; Optional Facilities Power Supply Process Gas Fitting Size & Type Purity Industrial grade or better Process Gas Fitting Size & Type Process Gas Pressure Regulated from 2 bar (30 psig) min. to 1bar (15PSI) max. Purge Gas Fitting Size & Type Process Gas Pressure Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. 2.5-in. OD Swagelok Tube Pneumatic Valves Fitting Size & Type Pneumatic Valves Fitting Size & Type CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Pneumatic Gas Purity CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Pneumatic Gas Pressure Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. Compliance SEMI S2/58 compliant Yes SEMI S2/50 CTAE Dimensions 1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.) Shipping Can Dimensions		-	9 , ,
Volume	Chamber	-	, , ,
Variable Electrode Configurations Number of Shelf Positions 7 25.4 mm (1 in.)	Ghainbei		,
Number of Shelf Positions 7 25.4 mm (1 in.)			,
Shelf Pitch			
Powered Electrode Dimensions - Working Area Cround (Perf.) Electrode Dimensions - Working Area Eloating Shelf Dimensions - Eloating Shelf			25.4 mm (1 in.)
Ground (Perf.) Electrode 229 W x 330 D mm (9 W x 13 D in.)	Electrodes	Powered Electrode Dimensions -	,
Dimensions - Working Area Floating Sholf Dimensions - Working Area			, , , , , , , , , , , , , , , , , , ,
Floating Shelf Dimensions - Working Area 190 W x 330 D mm (7.5 W x 13 D in.)			229 W x 330 D mm (9 W x 13 D in.)
Working Area 300 W			
Standard Wattage 300 W			190 W x 330 D mm (7.5 W x 13 D in.)
Gas Control Maximum Number of MFCs 4	RF Power		300 W
PLC Control with Touchscreen Interface PlasmaLINK; ProcessLINK; Optional			13.56 MHz
System Interface PlasmaLINK; ProcessLINK; Optional	Gas Control	Maximum Number of MFCs	4
PlasmaLINK; ProcessLINK; Optional	Control	PLC Control with Touchscreen	
PlasmaLINK; ProcessLINK; Optional	System	Interface	
Rotary Vane Pump charged for Oxygen Service 19.5 CFM at 60 Hz wet pump with oil mist eliminator Oxygen Service 110-240 VAC, 50-60 Hz, 1-phase, 10 A		PlasmaLINK; ProcessLINK;	Optional
Pump Oxygen Service Power Supply 110-240 VAC, 50-60 Hz, 1-phase, 10 A	Interface		
Power Supply 110-240 VAC, 50-60 Hz, 1-phase, 10 A	Vacuum		19.5 CFM at 60 Hz wet pump with oil mist eliminator
Process Gas Fitting Size & Type Purity Industrial grade or better Pressure & Flow Regulated from .69bar (10PSI) min. to 1bar (15PSI) max. Purge Gas Fitting Size & Type Process Gas Purity Industrial grade Nitrogen or CDA Process Gas Pressure Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. Pneumatic Valves Fitting Size & 7ype Pneumatic Gas Purity CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Pneumatic Gas Pressure Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. Exhaust 25.4mm (1 in.) OD Pipe Flange Compliance SEMI S2/S8 compliant Yes Cleanroom Compatible Yes SEMI E-10 Yes Shipping Crate Dimensions 1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)	Pump	Oxygen Service	
Purity Industrial grade or better Pressure & Flow Regulated from .69bar (10PSI) min. to 1bar (15PSI) max. Purge Gas Fitting Size & Type .25-in. OD Swagelok Tube Process Gas Purity Industrial grade Nitrogen or CDA Process Gas Pressure Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. Pneumatic Valves Fitting Size & .25-in. OD Swagelok Tube Type Pneumatic Gas Purity CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Pneumatic Gas Pressure Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. Exhaust 25.4mm (1 in.) OD Pipe Flange Compliance SEMI S2/S8 compliant Yes CE Marked Yes Cleanroom Compatible Yes SEMI E-10 Yes Shipping Crate Dimensions 1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)	Facilities	Power Supply	110-240 VAC, 50-60 Hz, 1-phase, 10 A
Pressure & Flow Purge Gas Fitting Size & Type Process Gas Purity Process Gas Pressure Pneumatic Valves Fitting Size & Type Pneumatic Gas Purity Pneumatic Gas Pressure Pneumatic Gas Purity Pneum		Process Gas Fitting Size & Type	.25-in. OD Swagelok Tube
Purge Gas Fitting Size & Type Process Gas Purity Industrial grade Nitrogen or CDA Process Gas Pressure Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. Pneumatic Valves Fitting Size & 7ype Pneumatic Gas Purity CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Pneumatic Gas Pressure Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. Exhaust 25.4mm (1 in.) OD Pipe Flange CE Marked Cleanroom Compatible Yes SEMI E-10 Yes Shipping Crate Dimensions 1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)		Purity	Industrial grade or better
Process Gas Purity Process Gas Pressure Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. Pneumatic Valves Fitting Size & 7ype Pneumatic Gas Purity CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Pneumatic Gas Pressure Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. Exhaust 25.4mm (1 in.) OD Pipe Flange Compliance SEMI S2/S8 compliant Yes CE Marked Yes Cleanroom Compatible Yes SEMI E-10 Yes Shipping Crate Dimensions I 397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)		Pressure & Flow	Regulated from .69bar (10PSI) min. to 1bar (15PSI) max.
Process Gas Pressure Pneumatic Valves Fitting Size & Type Pneumatic Gas Purity CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Pneumatic Gas Pressure Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. Exhaust SEMI S2/S8 compliant CE Marked Cleanroom Compatible SEMI E-10 Yes Shipping Crate Dimensions Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. 25-in. OD Swagelok Tube CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. 25.4mm (1 in.) OD Pipe Flange Yes CE Marked Yes SEMI E-10 Yes Shipping Crate Dimensions		Purge Gas Fitting Size & Type	.25-in. OD Swagelok Tube
Pneumatic Valves Fitting Size & .25-in. OD Swagelok Tube Type Pneumatic Gas Purity CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Pneumatic Gas Pressure Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. Exhaust 25.4mm (1 in.) OD Pipe Flange SEMI S2/S8 compliant Yes CE Marked Yes Cleanroom Compatible Yes SEMI E-10 Yes Shipping Crate Dimensions 1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)		Process Gas Purity	Industrial grade Nitrogen or CDA
Type Pneumatic Gas Purity CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Pneumatic Gas Pressure Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. Exhaust 25.4mm (1 in.) OD Pipe Flange SEMI S2/S8 compliant Yes CE Marked Yes Cleanroom Compatible Yes SEMI E-10 Yes Shipping Crate Dimensions 1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)		Process Gas Pressure	Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max.
Pneumatic Gas Purity CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Pneumatic Gas Pressure Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. Exhaust 25.4mm (1 in.) OD Pipe Flange SEMI S2/S8 compliant Yes CE Marked Yes Cleanroom Compatible Yes SEMI E-10 Yes Shipping Crate Dimensions 1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)			.25-in. OD Swagelok Tube
Exhaust 25.4mm (1 in.) OD Pipe Flange Compliance SEMI S2/S8 compliant Yes CE Marked Yes Cleanroom Compatible Yes SEMI E-10 Yes Shipping Crate Dimensions 1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)			1
Exhaust 25.4mm (1 in.) OD Pipe Flange Compliance SEMI S2/S8 compliant Yes CE Marked Yes Cleanroom Compatible Yes SEMI E-10 Yes Shipping Crate Dimensions 1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)		Pneumatic Gas Pressure	Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max.
CE Marked Yes Cleanroom Compatible Yes SEMI E-10 Yes Shipping Crate Dimensions 1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)		Exhaust	
Cleanroom Compatible Yes SEMI E-10 Yes Shipping Crate Dimensions 1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)	Compliance	SEMI S2/S8 compliant	Yes
SEMI E-10 Yes Shipping Crate Dimensions 1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)		CE Marked	Yes
Shipping Crate Dimensions 1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)		Cleanroom Compatible	Yes
		SEMI E-10	Yes
Gross Weight 445 kg (950 lbs)	Shipping	Crate Dimensions	1397 W x 1067 L x 2032 H mm (55 W x 42 L x 80 H in.)
		Gross Weight	445 kg (950 lbs)

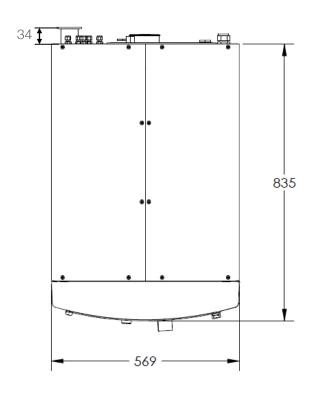
Optional /	Oil Filtration Unit
Ancillary	Nitrogen Generator
Equipment	Hydrogen Delivery Kit



AP-300 Plasma System Footprint Diagrams

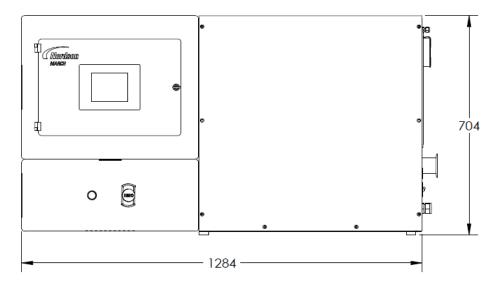






AP-300 - Top View

All measurements are in millimeters (mm)



AP-300 - Side View with Front Doors Open





AP-300 Plasma Treatment System

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AP-300 Reformatted Rev. A (2013-06)

Applications: AP-300 Plasma System

Semiconductor and Microelectronic Applications

- Pre-die attach for enhanced die adhesion
- Pre-wire bonding for improved wire bonds
- Pre-mold & encapsulation for reduced delamination
- Pre-flip chip underfill (FCUF) for faster, void-free fluid flow, improved filet height and uniformity, and better adhesion of the underfill material

Medical and Life Science Applications

- Stent & catheter cleaning and bonding
- Enabling adhesion of non-compatible materials
- Tack reduction of silicone molded parts
- Increasing lubricity

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

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AP-600 Plasma System

Bench-Top Plasma Treatment

Features and Benefits

- Touch screen control and graphical user interface give real-time process information
- Flexible shelf architecture allows processing of a wide variety of piece parts, components or carriers
- 13.56 MHz RF generator with automatic matching network delivers excellent process repeatability
- Convenient facility hook-ups for periodic calibration requirements used in validation processes



State-of-the-art plasma treatment in a compact, bench-top configuration

The AP-600 plasma system from Nordson MARCH is designed to deliver exceptionally uniform plasma cleaning and treatment with unmatched ease of operation, reliability and low cost.

The AP-600 plasma system is completely self-contained, requiring minimal bench space. The system chassis houses the plasma chamber, control electronics, 13.56 MHz RF generator, and the automatic matching network (only the vacuum pump is external to the system). Maintenance access is provided through an interlocked door or removable panels.

The plasma chamber is constructed of high-quality aluminum with aluminum fixtures for superior durability. The plasma chamber supports up to 7 removable and adjustable powered or grounded

shelves to accommodate a wide range of pieceparts, components, and part carriers including magazines, trays, and boats.

Plasma cleaning, surface activation and adhesion improvement

The AP-600 plasma system is suitable for a wide variety of plasma cleaning, surface activation and adhesion improvement applications. These capabilities are used for semiconductor manufacturing, microelectronic packaging and assembly, and by manufacturers of medical and life science devices.

The AP-600 plasma system can accommodate a wide range of process gases including argon, oxygen, hydrogen, helium, and fluorinated gases. The system comes standard with two electronic mass flow controllers for optimal gas control, with another two available optionally (four total max.).



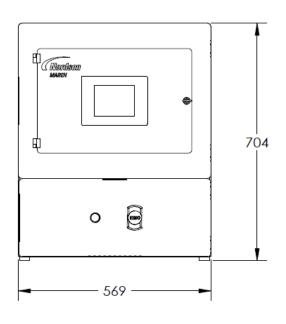
Specifications: AP-600 Plasma System

Enclosure	W x D x H – Footprint	569 W x 869 D x 704 H mm
Dimensions	w x D x H = Pootpiliit	(22.4 W x 32.9 D x 704 H in.)
Difficusions	Net Weight	221 kg (488 lbs)
	Effective Footprint – Clearances	Right, Left, Front – 569 mm (23 in.), Back – 254 mm (10 in.)
Chamber	Dimensions	406 W x 465 D x 267 H mm (16 W x 18.3 D x 10.5 H in.)
Chamber	Volume	50 liters (3024 in ³)
	Variable Electrode Configurations	Direct and Downstream
	Number of Shelf Positions	7
	Shelf Pitch	25.4 mm (1 in.)
Electrodes	Powered Electrode Dimensions -	330 W x 330 D (mm); 13 W x 13 D (in.)
	Working Area	, , , , , , , , , , , , , , , , , , ,
	Ground (Perf.) Electrode	368 W x 330 D (mm); 14.5 W x 13 D (in.)
	Dimensions - Working Area	
	Floating Shelf Dimensions –	330 W x 330 D (mm); 13 W x 13 D (in.)
DED	Working Area	ZOO W
RF Power	Standard Wattage	600 W
0 0 1	Frequency	13.56 MHz
Gas Control	Maximum Number of MFCs	4
Control	PLC Controlled with Touchscreen	
System	Interface	
Remote	PlasmaLINK; ProcessLINK	Optional
Interface	D V D 01 14	40.5 CFD 6 4011
Vacuum	Rotary Vane Pump Charged for	19.5 CFM at 60Hz wet pump with oil mist eliminator
Pump	Oxygen Service	
		110VAC, 20A, 50/60Hz, Single Phase, 12AWG, 3-Wire <u>OR</u> 220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire
Pump	Oxygen Service Power Supply	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire
Pump	Oxygen Service Power Supply Process Gas Fitting Size & Type	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube
Pump	Oxygen Service Power Supply	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better
Pump	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity Process Gas Pressure	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube
Pump	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better Regulated from .69bar (10PSI) min. to 1bar (15PSI) max.
Pump	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity Process Gas Pressure Purge Gas Fitting Size & Type	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better Regulated from .69bar (10PSI) min. to 1bar (15PSI) max25-in. OD Swagelok Tube Industrial grade Nitrogen or CDA
Pump	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity Process Gas Pressure Purge Gas Fitting Size & Type Purge Gas Purity	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better Regulated from .69bar (10PSI) min. to 1bar (15PSI) max25-in. OD Swagelok Tube
Pump	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity Process Gas Pressure Purge Gas Fitting Size & Type Purge Gas Purity Purge Gas Pressure	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better Regulated from .69bar (10PSI) min. to 1bar (15PSI) max25-in. OD Swagelok Tube Industrial grade Nitrogen or CDA Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max.
Pump	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity Process Gas Pressure Purge Gas Fitting Size & Type Purge Gas Purity Purge Gas Pressure Pneumatic Valves Fitting Size &	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better Regulated from .69bar (10PSI) min. to 1bar (15PSI) max. .25-in. OD Swagelok Tube Industrial grade Nitrogen or CDA Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. .25-in. OD Swagelok Tube CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5
Pump	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity Process Gas Pressure Purge Gas Fitting Size & Type Purge Gas Purity Purge Gas Pressure Pneumatic Valves Fitting Size & Type Pneumatic Gas Purity	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better Regulated from .69bar (10PSI) min. to 1bar (15PSI) max. .25-in. OD Swagelok Tube Industrial grade Nitrogen or CDA Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. .25-in. OD Swagelok Tube CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron
Pump	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity Process Gas Pressure Purge Gas Fitting Size & Type Purge Gas Purity Purge Gas Pressure Pneumatic Valves Fitting Size & Type Pneumatic Gas Purity Pneumatic Gas Pressure	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better Regulated from .69bar (10PSI) min. to 1bar (15PSI) max. .25-in. OD Swagelok Tube Industrial grade Nitrogen or CDA Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. .25-in. OD Swagelok Tube CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max.
Pump Facilities	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity Process Gas Pressure Purge Gas Fitting Size & Type Purge Gas Purity Purge Gas Pressure Pneumatic Valves Fitting Size & Type Pneumatic Gas Purity Pneumatic Gas Pressure Exhaust	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better Regulated from .69bar (10PSI) min. to 1bar (15PSI) max. .25-in. OD Swagelok Tube Industrial grade Nitrogen or CDA Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. .25-in. OD Swagelok Tube CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. 38 mm (1.5 in.) OD Pipe Flange
Pump	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity Process Gas Pressure Purge Gas Fitting Size & Type Purge Gas Purity Purge Gas Pressure Pneumatic Valves Fitting Size & Type Pneumatic Gas Purity Pneumatic Gas Pressure Exhaust SEMI S2/S8 compliant	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better Regulated from .69bar (10PSI) min. to 1bar (15PSI) max. .25-in. OD Swagelok Tube Industrial grade Nitrogen or CDA Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. .25-in. OD Swagelok Tube CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. 38 mm (1.5 in.) OD Pipe Flange Yes
Pump Facilities	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity Process Gas Pressure Purge Gas Fitting Size & Type Purge Gas Purity Purge Gas Pressure Pneumatic Valves Fitting Size & Type Pneumatic Gas Purity Pneumatic Gas Purity Pneumatic Gas Purity CE marked	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better Regulated from .69bar (10PSI) min. to 1bar (15PSI) max. .25-in. OD Swagelok Tube Industrial grade Nitrogen or CDA Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. .25-in. OD Swagelok Tube CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. 38 mm (1.5 in.) OD Pipe Flange Yes Yes
Pump Facilities	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity Process Gas Pressure Purge Gas Fitting Size & Type Purge Gas Purity Purge Gas Pressure Pneumatic Valves Fitting Size & Type Pneumatic Gas Purity Pneumatic Gas Purity Cas Pressure Exhaust SEMI S2/S8 compliant CE marked Cleanroom compatible	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better Regulated from .69bar (10PSI) min. to 1bar (15PSI) max. .25-in. OD Swagelok Tube Industrial grade Nitrogen or CDA Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. .25-in. OD Swagelok Tube CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. 38 mm (1.5 in.) OD Pipe Flange Yes Yes
Pump Facilities Compliance	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity Process Gas Pressure Purge Gas Fitting Size & Type Purge Gas Purity Purge Gas Pressure Pneumatic Valves Fitting Size & Type Pneumatic Gas Purity Pneumatic Gas Pressure Exhaust SEMI S2/S8 compliant CE marked Cleanroom compatible SEMI E-10	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better Regulated from .69bar (10PSI) min. to 1bar (15PSI) max. .25-in. OD Swagelok Tube Industrial grade Nitrogen or CDA Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. .25-in. OD Swagelok Tube CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. 38 mm (1.5 in.) OD Pipe Flange Yes Yes Yes
Pump Facilities	Oxygen Service Power Supply Process Gas Fitting Size & Type Process Gas Purity Process Gas Pressure Purge Gas Fitting Size & Type Purge Gas Purity Purge Gas Pressure Pneumatic Valves Fitting Size & Type Pneumatic Gas Purity Pneumatic Gas Purity Cas Pressure Exhaust SEMI S2/S8 compliant CE marked Cleanroom compatible	220VAC, 10A, 50/60Hz, Single Phase, 12AWG, 3-Wire .25-in. OD Swagelok Tube Industrial grade or better Regulated from .69bar (10PSI) min. to 1bar (15PSI) max. .25-in. OD Swagelok Tube Industrial grade Nitrogen or CDA Regulated from 2 bar (30 psig) min. to 5.5 bar (80 psig) max. .25-in. OD Swagelok Tube CDA, Oil Free, Dewpoint <=7°C /45°F, Particulate Size <5 micron Regulated from 3.4 bar (50 psig) min. to 5.5 bar (80 psig) max. 38 mm (1.5 in.) OD Pipe Flange Yes Yes

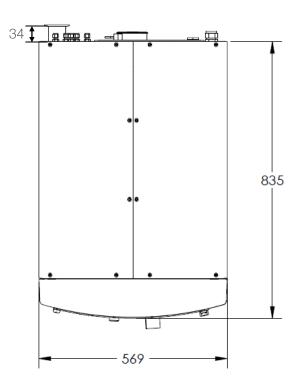
Optional /	Oil Filtration Unit
Ancillary	Nitrogen Generator
Equipment	Hydrogen Delivery Kit



AP-600 Plasma System Footprint Diagrams

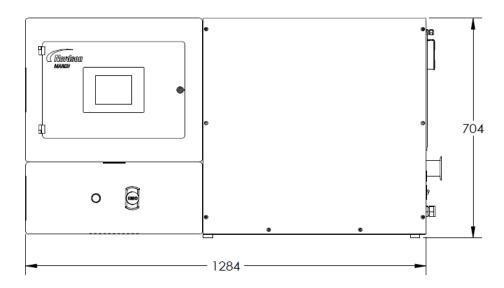


AP-600 - Front View



AP-600 – Top View

All measurements are in millimeters (mm)



AP-600 - Side View with Doors Open





AP-600 Plasma Treatment System

Nordson MARCH

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Applications: AP-600 Plasma System

Semiconductor and Microelectronic Applications

- Pre-die attach for enhanced die adhesion
- Pre-wire bonding for improved wire bonds
- Pre-mold & encapsulation for reduced delamination
- Pre-flip chip underfill (FCUF) for faster, void-free fluid flow, improved filet height and uniformity, and better adhesion of the underfill material

Medical and Life Science Applications

- Stent & catheter cleaning and bonding
- Enabling adhesion of non-compatible materials
- Tack reduction of silicone molded parts
- Increasing lubricity

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

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