

AP-1500 Plasma System

March
A NORDSON COMPANY

Effective plasma treatment in an extra-large batch system

The AP-1500 Plasma System is designed to provide best-in-class plasma treatment in a large batch-type plasma system. Daily operating expenses, such as process gases and power consumption, are minimized through unique design concepts. The AP-1500 Plasma System is a cost- and space-efficient plasma system for treating all types of parts and components.

The system is completely self-contained, and requires minimal floor space. The pump, chamber, control electronics, and 13.56 MHz RF generator are contained within its enclosure. Front and rear maintenance doors allow for convenient access to all interior components, and the pump is positioned on rollers for easy removal.

- Extra-large plasma chamber
- Small footprint (1118mm W x 1194 mm D)
- Intuitive touch screen control
- Easy operation and data logging
- Proven, robust plasma technology

Plasma cleaning and surface preparation

The AP-1500 Plasma System is designed to deliver superior performance for plasma cleaning and surface preparation applications. The horizontal electrodes (shelves) allow for large batch loads. The AP-1500 Plasma System is designed to maximize plasma efficiency through the use of proprietary power matching and control system algorithms.

The intuitive touch screen control panel monitors and controls the plasma process in real-time. The control system can be password-protected at multiple levels to prevent unauthorized recipe modification. This ensures consistent performance of the system from the first batch to the last.

The AP-1500 Plasma System offers slide-out horizontal shelves for ease of loading and unloading.

Its compact and service-friendly design features a small footprint, and is designed for maintenance access from only the front and rear of the system. Therefore, multiple systems can be placed side-by-side to maximize floor space utilization.



AP-1500 Plasma System

Features and Benefits

- Simple system operation and data logging
- Designed for fast, effective plasma cleaning and surface preparation
- Proprietary designs maximize treatment performance and throughput
- Easy loading and unloading of the chamber
- Compact system enclosure minimizes footprint
- Low operational costs and cost of ownership

System Specifications	
Enclosure	Powder-coated aluminum System chassis completely houses process chamber, control electronics, vacuum pump, and RF generator
Footprint	1118 W x 1956 H x 1194 D (mm) 44 W x 77 H x 47 D (in.)
Chamber	Construction: Aluminum Internal chamber dimensions: 762 W x 762 H x 762 D (mm) 30 W x 30 H x 30 D (in.) Number of available shelves: 14 (max.) Min. shelf pitch: 1.75 in. (~45 mm) Ground shelf max. working area: 698 W x 641 D (mm) Powered shelf max. working area: 643 W x 641 D (mm)
RF Power	2,000 W, solid state 13.56MHz RF generator with automatic tuning network
Gas Control	2 mass flow controllers
Controller	PLC with touch-screen interface
Pump System	53 CFM wet pump with oil mist eliminator Prepared, charged and tested with fluid for oxygen use
Facility Requirements	Power: 200-230 VAC, 3 phase, 30A (max.) Purge Gas: 0.25 in. Swagelok compression fitting, 50-80 psig For purge use Nitrogen or Clean Dry Air (CDA) Process Gas: 0.25 in. Swagelok compression fitting, 10-15 psig
Options	2 optional mass flow controllers (4 max.) 65 CFM dry pump system Oil filtration system PlasmaLink software for remote data capture & control N ₂ generator

Backed by the plasma experts

March Plasma Systems has a global team of scientists and engineers experienced in plasma technology. We work closely with you to determine the right plasma system and process that best fits your specific requirements. Our Applications and Customer Service departments bring you over 25 years of experience in plasma technology.

March Plasma Systems reserves the right to make design changes to products and components to improve their function. These changes may occur between printings.



Leading Plasma Innovations

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