

# FlexTRAK®-S Plasma System

## Features and Benefits

- Large-capacity plasma chamber, 9.6 liter, or twice the capacity of a standard FlexTRAK® plasma system, with high uniformity and short cycle times
- Easily integrates with a variety of process equipment, including wire bond, die attach, dispense, mold and marking equipment
- Slim structure requires minimal floor space. Service components are easily accessible from the front
- Flexible chamber configurations support direct, downstream and ion-free modes of plasma treatment
- Adjustable chamber kits and fixtures support the processing of a multitude of different substrates and products

## Superior Plasma Process Quality and Uniformity

Specially designed for processing larger substrates, the FlexTRAK®-S platform meets the plasma treatment requirements of advanced semiconductor and electronic packaging. It delivers uniform treatment and efficiency for a wide range of plasma applications. A higher power RF generator and improved vacuum conductance allows the FlexTRAK-S to perform equivalent to the smaller FlexTRAK platform. The chamber architecture remains the same, although elongated to accommodate more substrates. The result is a seamless transition between plasma chambers as production demands more capacity.

## High-Throughput Processing Capability

The FlexTRAK-S platform is a highly configurable, high-throughput plasma system. Its universal architecture accommodates a multitude of material handling configurations to support a wide assortment of variable-size form factors. Its chamber volume and proprietary process control enable unmatched short cycle times, while its slim structure minimizes floor space requirements.



The FlexTRAK-S platform handles a wide variety of product form factors, including boats, carriers, Jedec/Auer® boats, strips, and laminates. Depending on throughput and product form requirements, the system can be configured for magazine-to-magazine processing of single and multiple strips or lead frames and standalone for island-based production environments.

## SMART Tune™ Management System

The FlexTRAK-S platform's SMART Tune management system provides closed-loop plasma control that optimizes the RF system and minimizes tuning time. The system automatically recycles to a plasma-ready state, compensating for changes in vacuum pressure, temperature and varied lot sizes. Maximum power to the chamber is achieved in seconds with a proprietary algorithm that constantly measures forward and reflective power inside the chamber.

## Specifications: FlexTRAK®-S Plasma Systems

Enclosure Dimensions	W x D x H – Footprint	382W x 1210D x 1595H mm (2037H mm with light tower) 15W x 47.6D x 62.8H in. (80.2H in. with light tower)
	Net Weight	315 kg (693 lbs)
	Equipment Clearance	Right, Left – 153 mm (6 in), Front, Back – 914 mm (36 in)
Chamber	Maximum Volume	9.6 liters (585 in <sup>3</sup> )
Electrodes	Variable Electrode Configurations	Power-Ground, Ground-Power; Power-Power
	Working Area	305W x 560D mm (12W x 22D in.)
RF Power	Standard Wattage	600 W
	Optional Wattage	1000 W
	Frequency	13.56 MHz
Gas Control	Available Flow Volumes	10, 25, 50, 100, 250 or 500 sccm
	Maximum Number of MFCs	4
Control & Interface	Software Control	EPC with PC-Based Touch Screen Interface
	Remote Interface	SMEMA, SECS/GEM
Vacuum Pump	Standard Dry Pump	16 cfm
	Optional Wet Pump	19.5 cfm
	Optional Purged Dry Pump	16 cfm
	N <sub>2</sub> Purged Pump Flow	2 slm
Facilities	Power Supply	220 VAC, 15A, 50/60 Hz, 1-Phase, 12 AWG, 3-Wire
	Process Gas Fitting Size & Type	6.35 mm (0.25 in.) OD Swagelok Tube
	Process Gas Purity	Lab or Electronic Grade
	Process Gas Pressure	0.69 bar (10 psig) min. to 1.03 bar (15 psig) max., regulated
	Purge Gas Fitting Size & Type	6.35 mm (0.25 in.) OD Swagelok Tube
	Purge Gas Purity	Lab or Electronic Grade N <sub>2</sub> /CDA
	Purge Gas Pressure	2 bar (30 psig) min. to 6.9 bar (100 psig) max., regulated
	Pneumatic Valves Fitting Size & Type	6.35 mm (0.25 in.) OD Swagelok Tube
	Pneumatic Gas Purity	CDA, Oil Free, Dewpoint ≤7°C (45°F), Particulate Size <5 µm
	Pneumatic Gas Pressure	3.45 bar (50 psig) min. to 6.89 bar (100 psig) max., regulated
Compliance	SEMI	S2/S8 (EH&S/Ergonomics)
	International	CE Marked
Ancillary Equipment	Gas Generators	Nitrogen, Hydrogen (Requires Additional Non-Optional Hardware)
	Facilities	Chiller, Scrubber

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

**North America**  
Headquarters  
Concord, CA  
+1.925.827.1240

**China**  
Shanghai  
+86.21.3866.9166

**EMEA**  
Maastricht,  
Netherlands  
+31.65.155.4996

**S.E. Asia**  
Singapore  
+65.6796.9500

**Korea**  
Seoul  
+82.31.736.8321

**Taiwan**  
New Taipei City  
+886.2.2902.1860

**India**  
Chennai  
+91.44.4353.9024

[www.nordsonmarch.com](http://www.nordsonmarch.com)

[info@nordsonmarch.com](mailto:info@nordsonmarch.com)

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