

# 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

<b>Enclosure Dimensions</b>	<b>W x D x H – Footprint</b>	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)
	<b>Net Weight</b>	315 kg (693 lbs)
	<b>Equipment Clearance</b>	Right, Left – 153 mm (6 in), Front, Back – 914 mm (36 in)
<b>Chamber</b>	<b>Maximum Volume</b>	9.6 liters (585 in <sup>3</sup> )
<b>Electrodes</b>	<b>Variable Electrode Configurations</b>	Power-Ground, Ground-Power; Power-Power
	<b>Working Area</b>	305W x 560D mm (12W x 22D in.)
<b>RF Power</b>	<b>Standard Wattage</b>	600 W
	<b>Optional Wattage</b>	1000 W
	<b>Frequency</b>	13.56 MHz
<b>Gas Control</b>	<b>Available Flow Volumes</b>	10, 25, 50, 100, 250 or 500 sccm
	<b>Maximum Number of MFCs</b>	4
<b>Control &amp; Interface</b>	<b>Software Control</b>	EPC with PC-Based Touch Screen Interface
	<b>Remote Interface</b>	SMEMA, SECS/GEM
<b>Vacuum Pump</b>	<b>Standard Dry Pump</b>	16 cfm
	<b>Optional Wet Pump</b>	19.5 cfm
	<b>Optional Purged Dry Pump</b>	16 cfm
	<b>N2 Purged Pump Flow</b>	2 slm
<b>Facilities</b>	<b>Power Supply</b>	220 VAC, 15A, 50/60 Hz, 1-Phase, 12 AWG, 3-Wire
	<b>Process Gas Fitting Size &amp; Type</b>	6.35 mm (0.25 in.) OD Swagelok Tube
	<b>Process Gas Purity</b>	Lab or Electronic Grade
	<b>Process Gas Pressure</b>	0.69 bar (10 psig) min. to 1.03 bar (15 psig) max., regulated
	<b>Purge Gas Fitting Size &amp; Type</b>	6.35 mm (0.25 in.) OD Swagelok Tube
	<b>Purge Gas Purity</b>	Lab or Electronic Grade N2/CDA
	<b>Purge Gas Pressure</b>	2 bar (30 psig) min. to 6.9 bar (100 psig) max., regulated
	<b>Pneumatic Valves Fitting Size &amp; Type</b>	6.35 mm (0.25 in.) OD Swagelok Tube
	<b>Pneumatic Gas Purity</b>	CDA, Oil Free, Dewpoint ≤7°C (45°F), Particulate Size <5 µm
	<b>Pneumatic Gas Pressure</b>	3.45 bar (50 psig) min. to 6.89 bar (100 psig) max., regulated
<b>Compliance</b>	<b>SEMI</b>	S2/S8 (EH&S/Ergonomics)
	<b>International</b>	CE Marked
<b>Ancillary Equipment</b>	<b>Gas Generators</b>	Nitrogen, Hydrogen (Requires Additional Non-Optional Hardware)
	<b>Facilities</b>	Chiller, Scrubber

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

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