



# MARCH FlexTRAK-SHS

Industry-Leading Throughput and Reliability for Semiconductor Packaging Applications

Built on Nordson MARCH patented plasma technology, the FlexTRAK®-SHS offers full automation with a high-capacity F3-S chamber to increase uniformity and productivity.

The chamber architecture remains the same as the smaller FlexTRAK platform, providing a seamless transition between chambers to scale for increasing production demand.

A FlexTRAK-SHS variant with a standard F3 chamber is available if the capacity of the F3-S chamber is not required.

## The FlexTRAK-SHS provides the following:

### Industry-Leading Throughput

- Large capacity F3-S process chamber.
- Simultaneous strip buffering and processing.
- Advanced automation and magazine-splitting capabilities.

### New Product Development

- Advanced material handling.
- Ability to accommodate increasingly larger strip sizes.
- Sophisticated jam detection.

### Application Flexibility

- Plasma chamber effectiveness.
- Configurable process chamber.
- Versatile treatment modes.

## Key Applications

- Pre-wire bond plasma treatment on semiconductor package substrates and lead frames.
- Pre-underfill plasma treatment on flip chip packages.
- Pre-mold plasma treatment on semiconductor package substrates and lead frames.
- Plasma treatment of semiconductor package substrates and lead frames for improved adhesion.
- Removal/reduction of oxidation on lead frames.

# FlexTRAK-SHS

## Specifications

Enclosure Dimensions	W x D x H – Footprint	2314 W x 1935 D x 1787 H mm (2293 H mm with light tower) 91.1 W x 76.2 D x 70.5 H in (90.3 H in with light tower)
	Net Weight	1305 kg (2,871 lbs)
	Effective Footprint – Clearances	All sides – 700 mm (27.6 in)
Chamber	Volume	F3-S chamber: 9.6 liters (585 in <sup>3</sup> ) F3 chamber: 5.5 liters (338 in <sup>3</sup> )
Electrodes	Powered Electrode Dimensions	F3-S chamber: 305 W x 610 D mm / 12 W x 24 D in F3 chamber: 305 W x 305 D mm / 12 W x 12 D in
RF Power	Standard Wattage	F3-S chamber: 1000 W
	Frequency	13.56 MHz
Gas Control	Maximum Number of MFCs	3
Control System	Interface	EPC with PC-based touchscreen interface
Remote Interface	Communications	SECS/GEM, Remote HMI
Vacuum Pump	Standard Purged Dry Pump	16 CFM, Variable Frequency Drive
	N2 Purged Pump Flow	2 SLM
Facilities	Power Supply	220V, 40A, 50/60 Hz, Single Phase, 12 AWG, 3-Wire
	Process Gas Fitting Size & Type	.25-in OD Swagelok Compression
	Process Gas Purity	Industrial grade or better
	Process Gas Pressure	Regulated from .69 bar (10 psig) min to 1.4 bar (20 psig) max
	Purge Gas Fitting Size & Type	.25-in OD Swagelok Compression
	Purge Gas Purity	Industrial grade Nitrogen or CDA
	Purge Gas Pressure	Regulated from 5.5 bar (80 psig) min to 6.9 bar (100 psig) max
	Handler Pneumatic Valves Fitting Size & Type	10 mm push-in fitting
	Pneumatic Gas Purity	CDA, Oil Free, Dewpoint <=7 °C / 45 °F, Particulate Size <5 micron
	Handler Pneumatic Gas Pressure	4.5 – 6 bar (65 – 87 psig)
	Handler Exhaust Fitting	12 mm push-in fitting
Compliance	Certifications	CE Marked, SEMI S2/S8 (EH&S/Ergonomics)
Ancillary Equipment	Nitrogen Generator (option)	Necessary for Purge Gas Requirements
	Chiller (option)	Required When Configured with Cooled Electrode
	Hydrogen Kit (option)	Allows System to Use Hydrogen Gas for Processing
	Scrubber (option)	Intended for Fluorinated Operations on the System
Shipping	Gross Weight	1505 kg
	Number of Packages	1
	Packing Conforms to ISPM 15	Yes

# FlexTRAK-SHS

## System Packages

Nordson Electronics Solutions builds the future of electronics reliability all across the globe. We’re proud of the decades of service and solutions we’ve provided to enhance semiconductor reliability. No matter where you are, you’ve likely manufactured or purchased a product made reliable with our equipment. The FlexTRAK-SHS offers industry-leading throughput and reliability for semiconductor manufacturing applications, designed to last and provide cutting-edge capabilities continuing a time-honored tradition.

Explore the FlexTRAK-SHS system packages. Continue to see how we support the future.

For more information, contact us at [info-electronics@nordson.com](mailto:info-electronics@nordson.com).

Essential	Reliable, cost-effective plasma treatment.	The compact automated system uniformly treats microelectronic components for advanced semiconductor packaging applications. Low maintenance and dependability deliver excellent cost-of-ownership.
Productivity	Advanced throughput.	Accelerate throughput and yield with fully automated plasma processing and advanced jam detection optimized for thin or warped strips.

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July 2024

