MARCH FlexTRAK-CD and FlexTRAK-CDS

High-Throughput Plasma Processing of Strip-Type Components for Semiconductor Packaging Applications

The FlexTRAK®-CD and FlexTRAK®-CDS systems provide the following:

- Pre-die attach, pre-wire bond, pre-mold encapsulation, and pre-underfill plasma treatment capabilities.
- A convenient touchscreen graphical user interface (GUI).
- Production-ready, strip-handling system.
- A compact plasma chamber, short plasma cycle, and proprietary process control for maximum throughput and excellent cost of ownership.
- Unmatched production flexibility with support for a wide range of strip sizes.
- Access to service components via front pull-out shelves.

Key Applications

Plasma Contamination Removal and Cleaning

- Fluorine and other halogens.
- Metals and metal oxides.
- Organic compounds.

Plasma Etching and Surface Roughening

- Improve die adhesion and wire bonding.
- Improve mold adhesion and reduce delamination.

Surface Activation

- Improve die adhesive flow, eliminate voids, and enhance adhesion.
- Improve mold material flow, eliminate voids, and reduce wire sweep.
- Improve underfill flow, eliminate voids, enhance adhesion, and increase wicking speed.

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FlexTRAK-CD and FlexTRAK-CDS

Specifications

Enclosure Dimensions	W x D x H – Footprint	FlexTRAK-CD: 1068W x 1166D x 1600H; 1966H mm with Light Tower (42W x 46D x 63H; 77H in. with Light Tower)
		FlexTRAK-CDS: 1190W x 1320D x 1640H; 2114H mm with Light Tower (47W x 52D x 65H; 83H in. with Light Tower)
	Net Weight	FlexTRAK-CD: 430 kg (948 lbs.)
		FlexTRAK-CDS: 550 kg (1213 lbs.)
	Equipment Clearance	Right, Left, Back – 254 mm (10 in.), Front – 940 mm (37 in.)
Chamber	Maximum Volume	FlexTRAK-CD: 5.5 liters (338 in^3)
		FlexTRAK-CDS: 9.6 liters (585 in^3)
Electrodes	Variable Electrode Configurations	Power-Ground, Ground-Power, Power-Power
	Working Area	FlexTRAK-CD: 305W x 305D mm (12W x 12D in.)
		FlexTRAK-CDS: 305W x 550D mm (12W x 21D in.)
RF Power	Standard Wattage	600 W
	Frequency	13.56 MHz
Gas Control	Available Flow Volumes	50, 100, or 250 sccm
	Maximum Number of MFCs	3
Control System and Interface	Software Control	EPC with PC-based touchscreen interface
	Remote Interface	SMEMA, SECS/GEM
Vacuum Pump	Standard Purged Dry Pump	16 cfm
	N2 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 N2/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
	Exhaust	25.4 mm (1 in.) OD Pipe Flange
Compliance	SEMI	S2/S8 (EH&S/Ergonomics)
	International	CE Marked
Ancillary Equipment	Gas Generators	Nitrogen (Requires Additional Non-Optional Hardware)

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FlexTRAK-CD and FlexTRAK-CDS

FlexTRAK-CD

The FlexTRAK-CD system features a plasma chamber that can process up to 5 strips per plasma cycle. All substrate areas receive uniform treatment while maintaining tight control over process parameters for repeatable results. Also included in the system is a patented plasma module for exceptional uniformity and run-to-run process repeatability.

FlexTRAK-CDS

The FlexTRAK-CDS system features a large-capacity plasma chamber that can process up to 10 strips per plasma cycle. All substrate areas receive uniform treatment while maintaining tight control over process parameters for repeatable results.

Essential System Capabilities

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-CD and FlexTRAK-CDS systems offer high-throughput processing of strip-type components for semiconductor applications, designed to last and provide cutting-edge capabilities continuing a time-honored tradition.

Explore the FlexTRAK-CD and FlexTRAK-CDS capabilities. Continue to see how we support the future.

For more information, contact us at info-electronics@nordson.com.

Essential Capabilities	Reliable, cost-effective plasma treatment.	These compact automated systems uniformly treat microelectronic components for advanced semiconductor packaging applications. Low maintenance and dependability deliver excellent cost-of-ownership.

For more information, visit our website to find your local regional office or representative.

We have several global locations to serve you.

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