



# MARCH FlexTRAK and FlexTRAK-S

Plasma Processing of Strip-Type Components for Semiconductor Packaging Applications

## The FlexTRAK® and FlexTRAK®-S systems provide the following:

- Industry-leading throughput capacity with unmatched cycle times.
- A slim structure that requires minimal floor space, and all service components are easily accessible from the front.

### SMART Tune™ Management System:

- Closed-loop plasma control for RF system optimization and minimized tuning time.
- Automatic recycle to a plasma-ready state compensates for varied lot sizes, vacuum pressure, and temperature change.
- Achieve maximum power to the chamber in seconds with a proprietary algorithm that constantly measures forward and reflective power inside the chamber.

## Key Applications and Benefits

- The systems support variable-size form factors, including boats, carriers, Jedec/Auer® boats, strips, and laminates.
- Flexible chamber configurations support direct, downstream, and ion-free plasma treatment modes, allowing treatment without exposure to ions and UV.
- Magazine-to-magazine processing of single and multiple strips or lead-frames and standalone configurations for island-based production environments.
- Easy integration with existing process equipment, including wire bond, die-attach, dispense, mold, and marking

# FlexTRAK and FlexTRAK-S

## Specifications

|  |   |   |
|--|---|---|
| <b>Enclosure Dimensions</b>                    | W x D x H – Footprint                                     | 382 W x 1210 D x 1595 H mm (2037 H mm with light tower)<br>15 W x 47.6 D x 62.8 H in. (80.2 H in. with light tower) |
|  | Net Weight  | FlexTRAK: 275 kg (605 lbs.)   |
|  |   | FlexTRAK-S: 315 kg (693 lbs.)   |
| Equipment Clearance                            | Right, Left – 153 mm (6 in), Front, Back – 914 mm (36 in) |   |
| <b>Chamber</b>                                 | Maximum Volume  | FlexTRAK: 5.5 liters (338 in <sup>3</sup> )   |
|  |   | FlexTRAK-S: 9.6 liters (585 in <sup>3</sup> )   |
| <b>Electrodes</b>                              | Variable Electrode Configurations                         | Power-Ground, Ground-Power, Power-Power   |
|  | Working Area  | FlexTRAK: 305 W x 305 D mm (12 W x 12 D in.)  |
| FlexTRAK-S: 305 W x 550 D mm (12 W x 21 D in.) |   |   |
| <b>RF Power</b>                                | Standard Wattage  | 600 W   |
|  | Frequency   | 13.56 MHz   |
| <b>Gas Control</b>                             | Available Flow Volumes                                    | 50, 100, or 250 sccm  |
|  | Maximum Number of MFCs                                    | 3   |
| <b>Control System and Interface</b>            | Software Control  | EPC with PC-based touchscreen interface   |
|  | Remote Interface  | SMEMA, SECS/GEM   |
| <b>Vacuum Pump</b>                             | Standard Purged Dry Pump                                  | 16 cfm  |
|  | N <sub>2</sub> Purged Pump Flow                           | 2 slm   |
| <b>Facilities</b>                              | 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  |
|  | Exhaust   | 25.4 mm (1 in.) OD Pipe Flange  |
| <b>Compliance</b>                              | SEMI  | S2/S8 (EH&S/Ergonomics)   |
|  | International   | CE Marked   |
| <b>Ancillary Equipment</b>                     | Gas Generators  | Nitrogen (Requires Additional Non-Optional Hardware)  |

# FlexTRAK and FlexTRAK-S

## FlexTRAK

The three-axis symmetrical chamber in the FlexTRAK plasma system treats all positions of a product uniformly while maintaining tight control over process parameters for repeatable results.



## FlexTRAK-S

Process larger substrates with high uniformity, quality, and short cycle times with the FlexTRAK-S. The system features a 9.6-liter plasma chamber with twice the capacity of a standard FlexTRAK plasma system.

Adjustable chamber kits and fixtures support the processing of various substrates and products. The system also includes a high-power RF generator and enhanced vacuum conductance, delivering performance comparable to the smaller FlexTRAK system.



## 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 and FlexTRAK-S offer superior plasma process quality and automation for advanced semiconductor and electronics packaging, designed to last and provide cutting-edge capabilities continuing a time-honored tradition.

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

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

|                               |  |  |
|-------------------------------|--|--|
| <b>Essential Capabilities</b> | 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.

North America  
Asia Pacific  
EMEA

[www.nordson.com/electronics](http://www.nordson.com/electronics)  
[info-electronics@nordson.com](mailto:info-electronics@nordson.com)

North America Headquarters  
2762 Loker Avenue West  
Carlsbad, CA 92010-6603, USA

+1.760.431.1919

March 2026