

FlexTRAK™ CD Plasma System

Features and Benefits

- Highly uniform plasma treatment with fast throughput rates
- Production-ready strip handling system
- Easy to use touch screen graphical user interface (GUI)
- Service components accessible via front pull-out shelves
- High volume, small footprint and low cost of ownership



Superior Plasma Processing, Small Footprint, High-Throughput

The FlexTRAK™ CD platform is designed for high throughput processing of lead frame strips, laminated substrates, and other strip-type electronic components, up to 5 strips per plasma cycle.

The patented plasma chamber design provides high uniformity and process repeatability. It ensures all areas of the substrate are treated uniformly, while tight control over process parameters provides highly repeatable results.

The system accommodates a wide range of strip sizes, yielding unmatched production flexibility. Its small chamber volume and proprietary process control system provide short cycle times, with high machine autonomy.

Applications

Plasma for pre-die attach, pre-wire bond, pre-mold encapsulation and pre-underfill such as:

Contamination Removal & Surface Cleaning

- Fluorine & other halogens
- Metals & metal oxides
- Organic compounds

Etching and Surface Roughening

- Improve die adhesion & wire bonding
- Improve mold adhesion & 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

Specifications: FlexTRAK™ CD Plasma System

| | | |
|--------------------------------|---|--|
| Enclosure Dimensions | W x D x H – Footprint | 1068W x 1166D x 1600H; 1966H mm with Light Tower (42W x 46D x 63H; 77H in. with Light Tower) |
| | Net Weight | 430 kg (948 lbs) |
| | Equipment Clearances | Right, Left, Back – 254 mm (10 in.), Front – 940 mm (37 in.) |
| Chamber | Maximum Volume | 5.5 liters (338 in ³) |
| Electrodes | Variable Electrode Configurations | Power-Ground, Ground-Power; Power-Power |
| | Working Area | 305W x 305D mm (12W x 12D in.) |
| RF Power | Standard Wattage | 600 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 |
| | 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 |
| Compliance | SEMI | S2/S8 (EH&S/Ergonomics) |
| | International | CE Marked |
| | Exhaust | 25.4 mm (1 in.) OD Pipe Flange |
| 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.

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