

XTRAK™ Plasma Treatment System

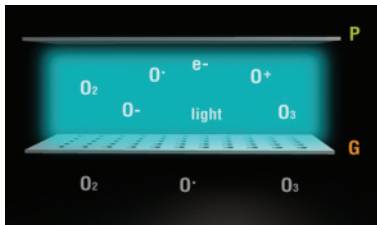
March
A NORDSON COMPANY

The XTRAK provides maximum performance and flexibility for surface treatment of electronic devices. With its innovative handling system, the XTRAK is ideal for applications such as adhesion promotion and contamination removal in a highly automated, in-line manufacturing operation or island configuration.

MULTIPLE PLASMA MODE CAPABILITY

The system can be configured for direct, downstream and downstream ion-free plasma.

Unique to the industry, the XTRAK can be configured in the downstream ion-free mode - removing ions, electrons and photons, enabling the chemically active radicals and byproducts to perform the work using oxygen as the source gas. The patent-pending XTRAK-IFP system is ideal for



cleaning pre-programmed memory devices when UV exposure may be an issue. Multiple plasma modes allow unrestricted choice of any process gas.

SMART TUNE™ MANAGEMENT SYSTEM

The XTRAK'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 with a proprietary algorithm that constantly measures forward and reflective power inside the chamber.

INNOVATIVE HANDLING AND CONFIGURATION

The XTRAK's flexible architecture accommodates a wide variety of products, such as single strips, process carriers, and larger, heavier components. Two-strip handling is also available for 6-inch (length) strips or smaller. Product handling reliability and control are ensured with a servo-driven handling system with soft deceleration.

The system operates in both automatic and manual modes, with a multi-processing feature that allows implementation of single or multiple recipes in one operation. By integrating the XTRAK system with loaders, the XTRAK operates in a



standalone configuration. It can also run in an island form-factor to feed a designated line of equipment, including component attach systems, wire bonders and dispense equipment.

FEATURES AND BENEFITS

- Fast, efficient surface treatment and cleaning prior to wire bonding, die attach, encapsulation, conformal coating, underfill and more
- Uniform plasma treatment across all part surfaces with its three-axis symmetrical chamber design
- Proprietary software control with intuitive graphical interface for easy touch-screen programming
- Ultimate application flexibility for direct, downstream and downstream ion-free plasma treatment
- Full front access to all interior components allows for convenient maintenance

System Specifications	
Enclosure	Powder-coated aluminum Completely houses the process chamber, electronics, pump and generator
Integrated Handling System	SMEMA 1.2 compatible Operation Modes: In-line automatic, manual and pass-through
Chamber	Material: Nickel-plated aluminum with aluminum fixturing Width Adjustment: Mechanical Substrate Dimensions: Width: 16-152 mm (0.63-6.0 in.) Length: 50-305 mm (1.97-12.0 in.) Height: 19 mm (0.75 in.) *
RF Power	600 W, solid state 13.56 MHz
Gas Control	Two (2) 100 SCCM mass flow controllers
User Interface	PLC with RS-232 PC with touch screen interface
Pump System	16 CFM Dry Pump
Facility Requirements	Footprint (with light tower): 1031 x 759 x 1830 mm (40.59 x 29.88 x 72.05 in.) Power: Single-phase 220VAC ± 10%, 20A, 50/60 Hz Gas: 0.25-in. compression fitting, 10-20 PSI, 0.25-in. tubing CDA: 80-100 PSI, 0.25-in. tubing Shipping Weight (including crate): XTRAK: 346 kg (762 lbs) XTRAK-IFP: 358 kg (790 lbs)
Options	Oil Filtration System Contact Angle Meter 110V or 220V Hydrogen Generator Kit Spare Parts Kits



**SEMI S2 S8 Compliant
CE Compliant**

* Note: The substrate can extend 12.7 mm (0.5 in.) below the conveyor rail.

March Plasma Systems reserves the right to make design changes to products and components to improve their function. These changes may occur between printings.

March
A NORDSON COMPANY

Leading Plasma Innovations

March Plasma Systems, Inc. 2470-A Bates Avenue Concord, California 94520 Telephone: 800-326-1151 Facsimile: 925-827-1189