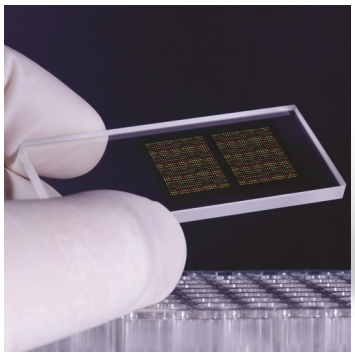
SEMICONDUCTOR

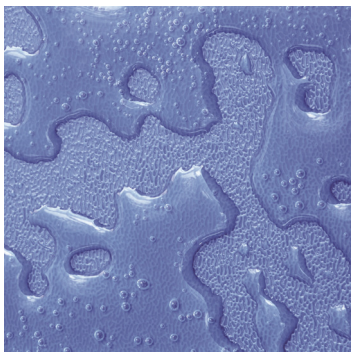
PCB/CHIP PACKAGING

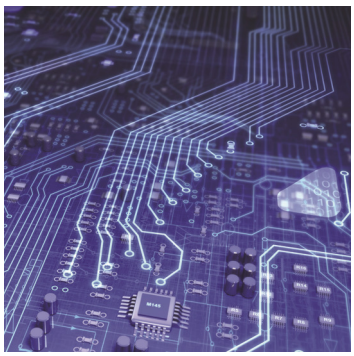
INDUSTRIAL/MEDICAL

PlasmaPen™

PVA TePla







PLASMA SYSTEMS

SEMICONDUCTOR | PCB/CHIP PACKAGING | INDUSTRIAL/MEDICAL

PlasmaPen™ Atmospheric Plasma System

The **PlasmaPen**™ is a patented atmospheric plasma solution for various surface preparation requirements such as surface clean and surface activation.

The **PlasmaPen**™ is a self-contained unit that operates at atmospheric pressure. Its patented design keeps high voltages and current safely inside of the pen body, away from the plasma jet and substrate surfaces.

Surface cleaning and activation with the **PlasmaPen**™ ensures a reliable wire and die bonding in semiconductor packaging. It has found particular success in adhesion promotion of anisotropic conductive film (ACF) used in flat panel display manufacturing to name a few.

Surface Cleaning/Activation Applications

- Electronics packaging
- Solar devices
- Flat Panel displays
- Textiles
- Life Science and Medical device products
- Automotive, Aerospace and Nautical parts
- Wires, cables, fibers
- Toys and consumer goods
- Windows/glass manufacturing

Features include

- Plug and play self installation
- High density plasma in contrast to corona discharge. No electrical current or filamentary streamers in the plasma jet
- Low thermal load (allows treatment of low melting point polymers)
- Simple host automation integration
- Low environmental impact
- Onboard systems monitoring and diagnostics

Technical Data

Treatment band Width: 3 mm to 10 mm (Configurable)

Standard Cable Length: 3 m to 6 m or (9 ft to18 ft)

Service Interval: 1500 h (Gas dependent)

Options

- Robotic operation (Multi Axis or X, Y, & Z)
- Multiple plasma jet array
- Foot pedal
- Custom fixtures
- Plasma detection
- Secondary gas cooling
- Ventilation hood
- Calibration equipment
- Plasma pulsing and secondary gas cooling

Machine Dimension and Weight

525 mm W x 395 mm D x 157 mm H
(20.7"x15.6"x6.2")

25 kg (55 lb)

Facilities Requirements

Electricity: 120 V, 1ϕ, 60 Hz, 4 A or
240 V, 1ϕ, 50/60 Hz, 2 A

Compressed Air Input Pressure: 6 bar (88 psi)

Other Gases: N_2, N_2/H_2, O_2, CO_2, He

Safety Certification Standards

- CE Certified
- EN 61010
- EN 60204

Certified System™
ISO 9001
QMI-SAI Global

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