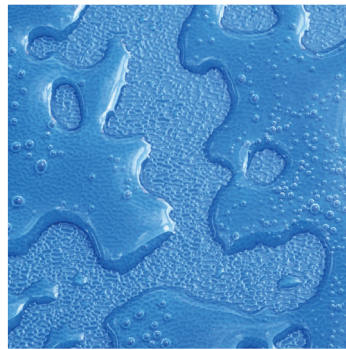
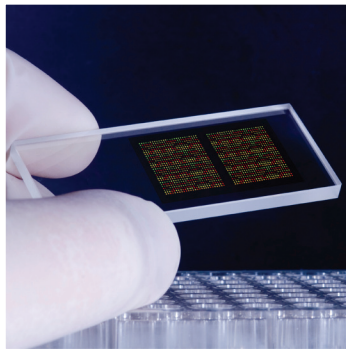


## Inline High Capacity PECVD & Etch System



## Inline High Capacity (ILHC) Plasma System

The ILHC is a continuous flow high speed vacuum plasma system. It offers full process control for plasma assisted chemical vapor deposition (PECVD), etching, cleaning and activation in a high volume production environment.

Gas plasma is the technology of choice for surface modification of materials in the life sciences, consumer electronics, semiconductors and a variety of industries. This new innovative system design has moved the field of plasma technology to a new level of performance and capability.

The ILHC was designed to meet the high production flow requirements of our customers. It provides fast process treatment times, excellent uniformity and process flexibility. Its features provide state of the art process control, fail-safe systems with alarms and complete data capturing and reporting software.

The ILHC uses radio frequency (RF) generated plasma combined with a unique conveyor system in an efficient and integrated package. The design allows for easy installation and maintenance in production environments.

### Features include:

- Continuous flow processing
- Customized trays and substrate fixtures
- Configurable plasma source design scalable for small to large 3-dimensional parts or ultra high volume small part processing
- Flexible RF Power Generator & Match based on process requirements
- Graphical User Interface (GUI) software complies with CFR Title 21 Part 11 and Semi E95-1101
- User access control for independent process development
- Process tolerance controls allowing precise lot-to-lot repeatability
- Remote statistical process control monitoring via Ethernet
- Onboard diagnostic features and alarm logging
- Recipe editor offers fast and versatile step control functionality
- Large (LCD) touch panel and keyboard provided with Windows® based control
- Robotic interface allows complete hands free operation

## Technical Data

### Process Chambers

<b>Material</b>	Stainless Steel
<b>Layout</b>	3 stages with integrated gate valves
<b>Tray Size</b>	Custom

### PVA TePla America, Inc.

251 Corporate Terrace  
 Corona CA 92879  
 Tel: 951-371-2500 . Fax 951-371-9272  
 Email: sales@pvateplaamerica.com

<b>Plasma Source</b>	Proprietary
<b>RF Generator</b>	Process Dependent
<b>Process Gasses</b>	Process Configurable
<b>Mass Flow Control</b>	Up to 6 gasses, 3 MFC's+Alternate gas
<b>Vapor Phase Mass Flow Control</b>	Precursor dependent
<b>Process Gas</b>	Input 1.4 - 2.7 bar (20-40 psi)
<b>Purge Gas</b>	Input 1.4 - 2.7 bar (30-40 psi)
<b>Compressed Air</b>	Input 5.4- 6.8 bar (80-100 psi)
<b>Process Pressure</b>	100-2000 mTorr (pump & gas flow dependent)
<b>Evacuation Time</b>	Approximately 60 seconds (substrate & material dependent)
<b>Power Input</b>	208-240 VAC, 3 phase 30A 380- 415 VAC, 3 phase 15A 50/60 Hz
<b>Dimensions</b> (without Conveyors)	83.78" Length (2128mm) 37.65 Width (956.31mm) 58.23 Height (1479mm)
<b>Total Length</b> (with Conveyors)	131.78" Length (3347mm)
<b>Weight</b> (with crate)	2641 lbs./ 1198 kg System 949 lbs./ 430 kg Pumps/Conveyors

### Optional

- Capacitance Manometer 1% pressure monitor
- Pressure Controller
- Light Tower
- Bar Code Reader
- Recirculating liquid chiller
- Monomer processing kit & heated gas lines
- Gas Monomer Alternative Gas Selection
- Direct Liquid Injector System
- Precision Syringe Dosing Unit
- N2 & H2 Generator
- Exhaust Abatement System
- USP (U.S. Pharmacopeia) Class VI Component Standards

### Safety Certification Standards

- CE certified
- 2006/95/EC, Low Voltage Directive
- Standard IEC EN 61010
- 2004/108/EC Electromagnetic Compatibility
- Standard IEC EN 61326
- CISPR 55011

