



Low Pressure Plasma Cleaner

PES-200



A Plasma Cleaner to
Empower Your Innovations

PLASOL

PES-200

Low Pressure Plasma Cleaner

The PES-200 Cleaner is a powerful plasma surface treatment device equipped with a rectangular chamber that can accommodate a maximum 500W generator and samples of various sizes and shapes.

The PES-200 can be installed with up to four gas flow controllers and is specifically designed to use fluorine-based gases to generate plasma, supporting etching, ashing, and descum processes. Additionally, it enables various surface modification treatments tailored to different applications.

This equipment adopts a CCP(Capacitively Coupled Plasma) discharge method using dual electrodes, ensuring high plasma uniformity. With an embedded system, it allows precise variable settings, supports fully automatic operation mode, and enhances the accuracy and convenience of plasma processes, making it a high-performance surface treatment system.



SPECIFICATIONS

- **Generator** : Max. 500 W (Level Control: 0~100%)
- **Frequency** : 10~50 kHz, Active Fan Cooling
- **Process Gases** : O₂ or Air, N₂, Ar, CF₄, etc. (1/4" Lok)
- **Mass Flow Controllers** : Max. ×4 EA (0~100 sccm)
- **Reactor Chamber** : W.200 × D.230 × H.100 mm (Cubical)
- **Chamber Material** : Anodized Aluminum (6061)
- **Pressure Gauge** : Pirani (0.5 mTorr~Atm.)
- **Vent & N₂ Purge Inlet** : ×1 Channel Each
- **System Dimensions** : W.410 × D.575 × H.660 mm
- **Electricity** : 110-250V AC, Compliance : CE

OPERATION CONTROL

- Fully Automatic (Total 10 Recipes) & Manual Modes
- Digital Input via 10.1" Touchscreen PC (Linux Embedded System)
- Adjustable Parameters : Power[W], Gas Flow [sccm], Durations [mm:ss]
- Configurable Options : Vent & Purge Time [sec], Working Pressure [Torr]
- Chamber & Gas Valve [Open/Close], Vacuum Pump [ON/OFF]

VACUUM PUMP

- 2-Stage Oil Rotary Pump (RV12_Edward)
- Dimensions : W.430 × D.158 × H.261 mm
- Peak Pumping speed : 8.4cfm (238L/min), Connection : KF25
- Ultimate pressure : 1.5×10^{-3} Torr (1.5×10^{-2} Torr with Fomblin®)
- 220V AC (Supplied by Plasma Cleaner)

APPLICATIONS

PDMS Microfluidic Chip
Bonding and Activation

Hydrophilic/phobic
Treatment of Plastics

Electrode Cleaning
& Wire Bonding

Graphene & 2D TMD
Transfer and Activation

Photoresist Removal
Plasma Ashing & Descum

Photocatalyst Activation
& OLED Fabrications

FEATURES

• Low-Pressure Plasma Treatment :

Dry-etching process that modifies the near-surface layer without damaging the bulk material properties.

• Versatile Gas Options :

Supports the use of a broad range of process gases for diverse surface modifications, including hydrophilic/phobic treatments, cleaning, activation, and etching.

• Fully Automatic Operation :

Supports a recipe-driven automatic plasma discharge. A simple button click initiates the predefined process.

• CCP Discharge with Dual-electrode :

Provides conformal surface treatment with high uniformity, effective for intricate contours and various sample sizes.

• High-Precision Process Control :

Features advanced components, including a Mass Flow Controller (MFC), Pirani Gauge, and a finely adjustable Plasma Generator, ensuring optimal accuracy in process executions.

• Interactive User Interface :

10.1" touchscreen with intuitive navigation software offers straightforward management and easy adjustment of the plasma process.