PROCESS SOLUTIONS
YOU CAN COUNT ON

VP SERIES

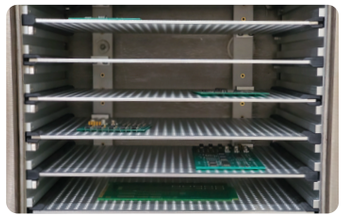
VACCUM PLASMA TREATMENT SYSTEM

Product Description

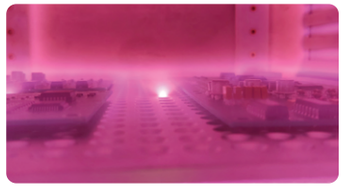
ANDA's VP-Series are offline (standalone) batch style vacuum plasma treatment systems designed for atomic level etching, cleaning, and activation of a materials surface energy. During this process, materials being treated are completely immersed within a vacuumed plasma environment allowing all surface areas of complex parts and materials to be treated and activated simultaneously.

In the electronics industry, plasma treatment is highly encouraged prior to selective conformal coating or dispensing processes to improve wetting of coatings and the adhesion strengths of coatings and other dispensed materials. When materials are plasma treated, coatings and adhesives are significantly less susceptible to fail. Plasma treatment to electronics ensures maximum protection from coatings and glues and a long product life for the intended device.

- **Adjustable Shelves:** allow processing of a wide variety of part geometrics
- **Batch Style:** each unit is completely self-contained, requiring minimal floor space
- **Ultra-low Temperature:** system operation temperature as low as 40°C
- **Omni-directional:** complete immersion of the treated material by anisotropic plasma
- **Environmentally Friendly:** zero chemicals are used, and no harmful substances are produced
- **Cleaning:** remove fine dust, oil, grease, and organic compounds
- **Activation:** increase surface energy to promote wetting and adhesion
- **ESD Safe:** process is virtually electrostatically neutral and safe for sensitive electronics



Removeable shelves for easy space arrangement



Plasma treatment in action

ANDA Technologies USA, Inc.
info@anda.us
+1 510 270 8648
47639 Lakeview Boulevard, Fremont, CA 94538, USA

Specifications :

System Specifications

VP Series Vacuum Plasma Treatment System

	VP-60L	VP-80L	VP-100L	VP-150L
Vacuum Chamber				
Internal Size of Vacuum Chamber	L 403 mm (15.86″) W 400 mm (15.74″) H 403 mm (15.86″)	L 450 mm (17.71″) W 400 mm (15.74″) H 450 mm (17.71″)	L 470 mm (18.50″) W 460 mm (18.11″) H 470 mm (18.50″)	L 500 mm (19.68″) W 600 mm (23.62″) H 500 mm (19.69″)
Electrode Plate Size	L 374 mm (14.72″) W 319 mm (12.55″)	L 420 mm (16.53″) W 320 mm (12.59″)	L 440 mm (17.32″) W 380mm (14.96″)	L 520 mm (20.47″) W 470 mm (18.50″)
Electrode Plate Structure	Horizontal 8 Layers			
Electrode Plate Material	Special Aluminum			
Chamber Material	Stainless Steel			
Operation				
Vacuum Pump System	Two-Stage Rotary Plate Vacuum Pump & Roots Vacuum Pump			
Vacuum Measure System	Pirani Resistance Vacuum Meter			
Working Vacuum Pressure	10 - 100 Pa			
Ultimate Pressure of Vacuum Pump	5×10^{-1} Pa			
Time to Achieve Vacuum	≤ 55s	≤ 70s	≤ 80s	≤ 100s
Time for Vacuum Release	≤ 15s	≤ 20s	≤ 25s	≤ 30s
Gas Measure System	Mass Flow Controller			
Gas Control Range	Mass Flow 0 - 300 SCCM (Optional)			
Gas Pressure	0.6 MPa			
Gas Generator	Clean Dry Air, Oxygen O_2, Nitrogen N_2, Argon Ar, Methane CH_4 (Two working gases are optional)			
RF Generator	0 - 500 W			0 - 1000 W
RF Matcher	0 - 500 W			0 - 1000 W
Operation Mode	Manual Pick and Place, One-Button Automatic Operation			
Facility				
Footprint	L 1200 mm (47.24″) W 920 mm (36.22″) H 1690 mm (66.53")			
Weight	~560 kg (~1235 lbs)	~580 kg (~1280 lbs)	~630 kg (~1390 lbs)	~680 kg (~1500 lbs)
Input Power	AC 380 V 50/60 Hz 3-phase 5-wires system			
Rated Power	4 kW			4.5 kW
Interface				
Control System Hardware	Panasonic PLC & 10″Touch Screen			
Software	Anda Software