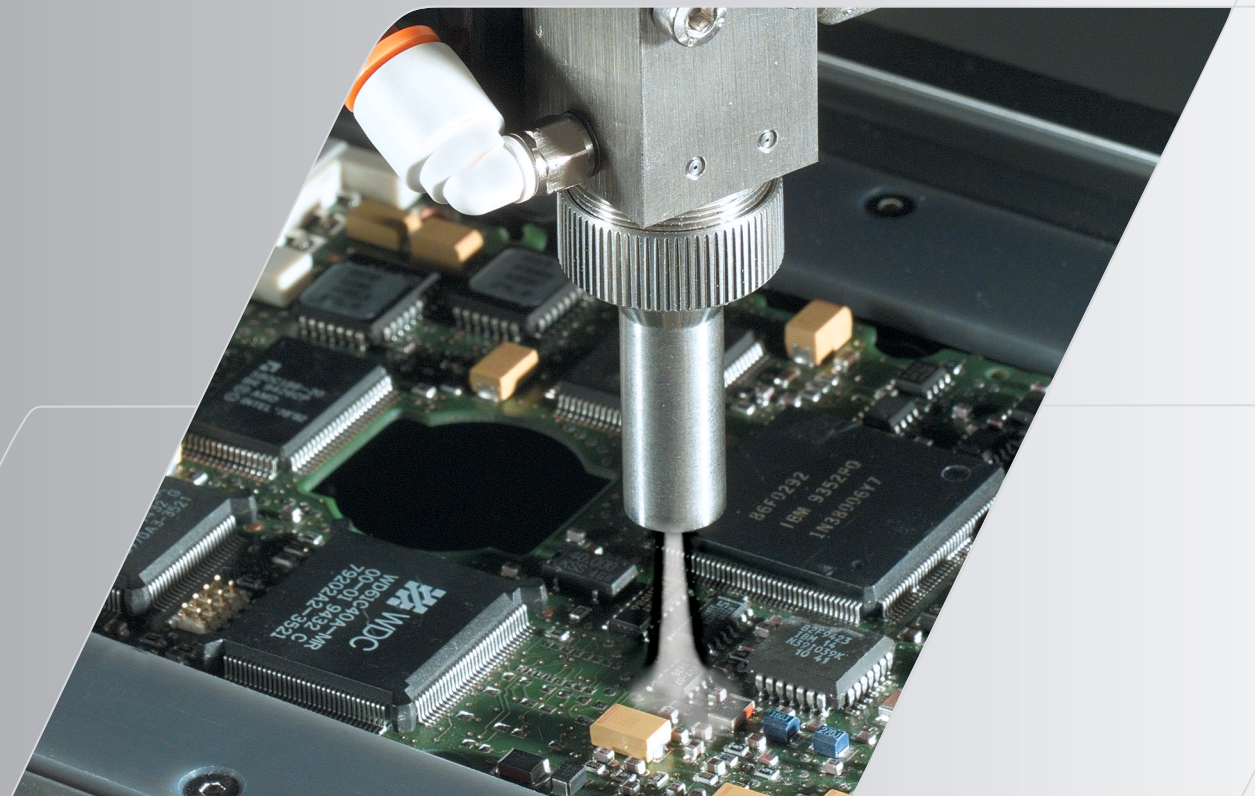




WHERE  
PRECISION  
DRIVES  
PRODUCTION



**PVA2000**

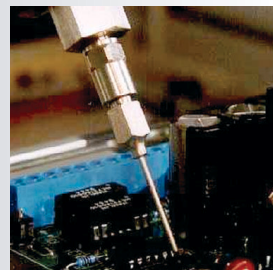
15 Solar Drive  
Halfmoon NY 12065  
**tel** 518 371 2684  
**fx** 518 371 2688  
info@pva.net

## PVA2000

The PVA2000 introduces a clean, efficient process for applying conformal coatings while virtually eliminating labor-intensive masking operations. Utilizing a controlled atomized spray and a non-atomized flow coating process, the PVA2000 limits conformal coatings to a defined, preprogrammed coverage area. Film builds as low as 0.01 mm (0.0005") can be achieved across the desired surface. The PVA2000 selective coating process results in greater material utilization with transfer efficiencies of 99%, a significant increase over dip, brush, or hand spray applications.

## MOTION

The PVA2000 features the most flexible and robust motion platform in the coating industry. An overhead gantry system featuring ball screw slides is driven by brushless DC servo motors. Optical encoder feedback on all axes ensures a closed-loop process and provides long-term reliability. The PVA2000 offers motion in all axes simultaneously allowing the programmer to contour application heads around intricate devices and adjust the spray pattern width on the fly.



The PVA2000 comes standard with three-axes of programmable motion. In addition to traditional XYZ motion, the FC100 flow coating valve is mounted on a tilt actuator to allow angled access to the side of components and shadowed areas.

For greater motion capability, the PVA2000 is available with patented fourth-axis technology. Unlike competitive pneumatic or stepping rotational devices, PVA offers the only servo controlled fourth-axis option. Once a valve head is angled, PVA's fourth-axis motion allows rotation of the entire dispense head permitting access to all sides of a component. PVA's fourth-axis option is the most capable motion platform configuration for eliminating masking and working around densely populated assemblies.

## PATHMASTER®

PathMaster®, PVA's exclusive Windows®-based programming software offers an integrated solution for creating coating areas, lines, dots, circles, and arcs. Utilizing a remote teach pendant and trackball, an operator can interface with PathMaster® and select points to build a program. PathMaster® also supports offline programming by allowing the import of CAD data and digital files to quickly fill areas by simply clicking on the desired coverage area at your desktop. FastPath™ offline programming capability is standard on all PVA platforms.

The PVA2000's non-volatile memory can hold up to 30 programs for immediate recall on the front panel LCD screen. Greater program storage capabilities are available when you tether a computer system to the coating platform. An RS232 communication port comes standard on the PVA2000. PathMaster® is compatible with Windows® 95, 98, 2000, NT, ME, and XP formats.



## APPLICATORS

PVA utilizes a combination of atomized spray and non-atomized flow coating valves to achieve desired coverage results. PVA applicators are versatile and compatible with all coatings regardless of chemistry or viscosity. Fan and oval spray patterns, as well as a non-atomized bead mode are available to assist in eliminating masking requirements.



**FCS100-ES** A controlled, oval atomized spray down to 0.125" makes the FCS100-ES the ideal valve for work around delicate keep-out areas.

**FCS100** The FCS100 features an interchangeable spray cap offering the flexibility of oval or fan-shaped spray patterns in widths ranging from 0.25" to over two inches.

**FC100** A non-atomized flow coating valve used for applying dots and beads of conformal coating in and around keep-out areas. The FC100 is mounted on a tilt axis to allow coating on the side or underneath components.

The PVA2000 can be configured with any combination of spray and dispense valves to best optimize your process. A PVA applications engineer can assist in developing a solution that best fits your process.

## CURING AND BOARD HANDLING OPTIONS

PVA can outfit your coating process with a variety of modular inline curing, inspection, and board handling equipment. Curing tunnels featuring infrared heat are available in four, eight, or twelve-foot lengths. Independent heating zones can achieve panel temperatures of 260° C (500° F). To enhance the curing process, humidity and CO<sub>2</sub> presence can be implemented into the oven.



IR2000



UV2000

In processing materials that require ultraviolet light to cure, PVA utilizes Fusion® UV lamps. Fusion provides reliable cure results and consistent intensity output throughout the life of the bulb. Cure widths ranging from 6" to 20" are available to meet your specific requirements. All PVA cure tunnels feature edge-handling conveyors and single or dual-sided processing options.

For more information on PVA's curing and board handling options, visit our online catalog library at [www.pva.net/library.html](http://www.pva.net/library.html).

## GLOBAL SERVICE NETWORK

PVA provides award winning 24-hour global service and support for all customers. PVA is a three-time winner of Circuits Assembly's prestigious Service Excellence Award honoring superior customer response, technology, and value in the dispensing industry. PVA has a global staff of service engineers available to assist with the installation, training, and optimization of your process.



PathMaster® is a registered trademark of Precision Valve & Automation, Inc. FastPath™ is a trademark of Precision Valve & Automation, Inc. Windows® is a registered trademark of Microsoft Corporation. Fusion® is a registered trademark of Fusion UV Systems, Inc.

## PVA2000 SPECIFICATIONS

### Travel Speed

0 to 700 mm/sec (0 to 27.6 in/sec)

### Payload Capacity

25 pounds (11.4 kg)

### Standard Work Area

500 mm x 500 mm x 100 mm (19.68 in x 19.68 in x 3.94 in)

### Repeatability

0.025 mm (0.001 in)

### Positional Resolution

0.005 mm (0.0002 in)

### Power Requirements

120V, 220V, +/-10%, 50-60 Hz

### Air Supply Requirements

80 PSI dry, unlubricated air

### Exhaust Requirements

150 cfm minimum

### Conveyor Speed

Programmable up to 80 ft/min (24.4 m/min)

### Conveyor Height

Adjustable between 940 mm and 965 mm (37 in and 38 in)

### Conveyor Compatibility

SMEMA

### Conveyor Process Flow

Programmable right to left or left to right

### Conveyor Edge Clearance

SMEMA standard 0.185 in (5 mm)

### Belt Conveyor Weight Limit

5 pounds per section

### Chain Conveyor Weight Limit

15 pounds per section

### System Weight

700 pounds (317 kg)

### Certification

CE certified

