



INNOVATION. **PRECISION.** EXCELLENCE.



## System Specifications

### Gantry System Design

Closed loop brushless DC servo motors with optical encoders and ball screw slides on all axes

### Work Area

1 Valve / Tool:

521 mm x 485 mm x 100 mm  
(20.51 in x 19.09 in x 3.94 in)

### XYZ Repeatability

±25 microns (±0.001 in)

### Resolution

5 microns (0.0002 in)

### Maximum Acceleration

.6 g

### Footprint

847 mm x 1136.9 mm x 1606 mm  
(33.35 in x 44.76 in x 63.23 in)

### Programming Software

PathMaster® software with offline image import and programming capability

## Delta 6 Selective Coating/Dispensing System

The Delta 6 is a new, reimagined flexible robotic conformal coating/dispensing system that is ideal for selective coating, potting, bead, and meter-mix dispensing applications. The Delta 6 features a robust overhead three-axis motion platform suitable for inline or batch operations.

While maintaining the preferred features of previous workcells, the Delta 6 has been designed with a slimmer footprint, improved structural and gantry rigidity for robustness, and easier access.

The Delta 6 has many options and integrated features including:

- Robotic system repeatability of 25 microns
- Patented servo-controlled optional four-axis motion featuring valve tilt and rotate
- Closed loop process control throughout gantry system
- Multiple dispensing applications or materials in one cell
- Onboard PC for unlimited program storage
- Exclusive PathMaster® programming environment

For more information, please contact PVA at [info@pva.net](mailto:info@pva.net) or (518) 371-2684.



# Delta 6

The Delta 6 is ideal for selective conformal coating and dispensing applications that require a high level of accuracy and repeatability in moderate to high volume manufacturing environments. It is a closed-loop robotic platform featuring optical encoder feedback on all axes.

**Power** 120V, 220V, 50-60 Hz  
**Air Supply** 80 psi dry, unlubricated air

## XYZ Specifications

Gantry System: Brushless DC servo motors  
 Precision ball screw slides  
 XYZ Repeatability: ±25 microns (±0.001 in)  
 Maximum Speed (XYZ): 670 mm/sec (26.4"/sec)  
 Maximum Acceleration: .6g

Resolution: 5 microns (0.0002 in)

Payload Capacity: 11.36kg (25 lbs)

## Standard Features

PathMaster® Windows- based software  
 FastPath™ offline image programming capability  
 Onboard PC with flat screen monitor  
 Remote teach pendant with trackball  
 USB communication port  
 Closed-loop low level exhaust notification (spray systems)

## Optional Features:

Servo 4th Axis motion featuring valve tilt & rotate  
 Closed-loop material flow monitoring  
 Inline material metering  
 Bar code program selection  
 Low level fluid sensor  
 Valve and / or fluid heating  
 Programming camera  
 Active vision with XY correction  
 Substrate heating – contact or non-contact  
 Dispense zone weigh scale  
 Multi-zone conveyor  
 Conveyor auto width adjust

## Board Handling

Conveyor Type: Flat belt or chain  
 Minimum Conveyor Width: 50 mm (1.97 in)  
 Maximum Conveyor Width: 500 mm (19.685 in)  
 Board Clearance Topside: 80 mm (3.15 in)  
 Board Clearance Underside: 80 mm (3.15 in)  
 Edge Clearance: 4.7 mm (0.185 in)

Transport Height: 940 mm - 965 mm (37" - 38")  
 Communications Protocol: SMEMA  
 Conveyor Options: Lift and locate, through hole pin, under board support

Conveyor Speed: Up to 24.4m/min (80ft/min)  
 Process Flow: Programmable right to left or left to right, bidirectional

Weight Limit: 5 pounds (belt)  
 15 pounds (chain)

## Fluid Applicators

Spray Valves: FCS300-ES, FCS300-R/F, FC100-CF  
 Dispense Valves: FC100-MC, FCM100, SB300  
 Jetting Valve: JDX  
 Auger Valves: SV200, SVX  
 Progressive Cavity Pumps: PCP, PDP

Material Feed Options: Syringe (1-55cc)  
 Cartridge feed (6-20 oz)  
 Pressure vessel  
 Drums, totes

**Backside of Machine: 80 - 100 PSI dry compressed air required  
 Minimum 300CFM exhaust required**

**Power drop required - See machine spec for voltage**

