

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

1g

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



WHERE
PRECISION
DRIVES
PRODUCTION

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 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): 700/mm/sec (27.6"/sec)

Maximum Acceleration: 1g

Resolution: 5 microns (0.0002in)

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 Applications

Spray Valves: FCS300-ES, FCS300-R/F, FC100-CF

Dispense Valves: FC100-MC, FCM100, SB300

Jetting Valve: JDX

Auger Valves: SV200, SVX
Progressive Cavity Valves: VPK450, VPK2K

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 150CFM exhaust required

Power drop required - See machine spec for voltage

