



**WHERE
PRECISION
DRIVES
PRODUCTION**



PVA650 SELECTIVE COATING / DISPENSING SYSTEM

The PVA650 is a flexible robotic platform that is ideal for selective coating, potting, bead, and meter-mix dispensing applications. The PVA650 features a robust overhead three-axis motion platform suitable for inline or batch operations.

The PVA650 has many integrated features including:

- ▲ Robotic system accuracy of 25 microns
- ▲ Patented servo-controlled optional four-axis motion featuring valve tilt and rotate
- ▲ Closed loop process control throughout gantry system
- ▲ Micron level encoder resolution for unparalleled accuracy
- ▲ Multiple dispensing applications or materials in one cell
- ▲ Onboard PC for unlimited program storage
- ▲ Exclusive PathMaster® programming environment
- ▲ PVA's award winning global service network

For more information on PVA's automated dispensing capabilities, please contact one of our sales representatives at (518) 371-2684.

PVA650 SPECIFICATIONS

Gantry System Design:

Closed loop brushless DC servo motors, ball screw slide, and optical encoders on all axes

XYZ Travel:

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

XYZ Repeatability:

25 microns (0.001")

Encoder Resolution:

15 microns (0.0006")

Maximum Acceleration:

1g

Footprint:

1219 mm x 940 mm x 1607 mm
(48" x 37" x 63.25")

Programming Software:

PathMaster® software with offline image import and programming capability



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PVA650

The PVA650 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. The PVA650 is a closed-loop robotic platform featuring optical encoder feedback on all axes.

Initial Work Area: 500mm x 500 mm x 100mm
Power: 120V, 220V, 50-60 Hz
Air Supply: 80 psi dry, unlubricated air

Board Handling:
 Conveyor Type: Flat belt or chain
 Minimum Conveyor Width: 50 mm (1.97")
 Board Clearance: 55 mm (2.17")
 Edge Clearance: 4.7 mm (0.185")
 Transport Height: 940 mm – 965 mm (37" – 38")
 Communication Protocol: SMEMA

XYZ Specifications
 Gantry System: Brushless DC servo motors
 Precision ball screw slides
 XYZ Repeatability: 25 microns (0.001")

Conveyor Options: Lift and locate, through hole pin, under board support
 Conveyor Speed: Up to 24.4m/min (80 ft/min)
 Process Flow: Programmable right to left or left to right, bidirectional
 Weight Limit: 5 pounds (belt)
 15 pounds (chain)

Maximum Speed (XYZ): 700 mm/sec (27.6"/sec)
 Maximum Acceleration: 1g

Encoder Resolution: 15 microns (0.0006")

Payload Capacity: 11.36 kg (25 pounds)

Standard Features:

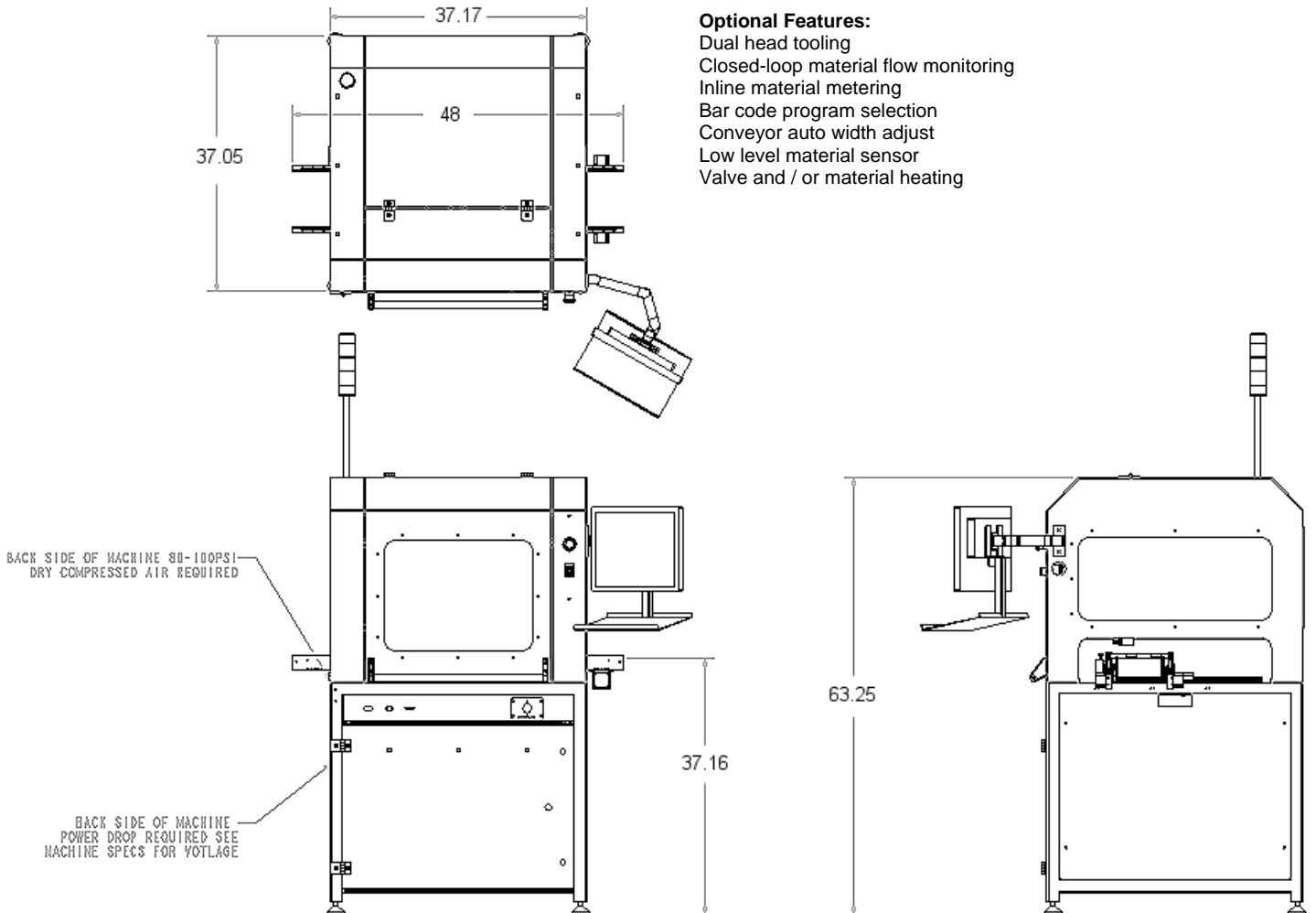
PathMaster® Windows-based software
 FastPath™ offline image programming capability
 Onboard PC with flat screen monitor
 Remote teach pendant with trackball
 RS232 communication port
 Closed-loop low level exhaust notification (spray systems)
 Light tower (conveyorized systems)

Dispensing Methods:

FCS300-ES: Oval pattern spray valve
 FCS300: Fan / oval pattern spray valve
 FC100-C: Non-atomized film coater
 FC100MC: Needle valve
 FCM100: Bead, dot propulsion
 Material Feed Options: Cartridge feed (6 – 20 oz.)
 Pressure vessel
 Drums, totes

Optional Features:

Dual head tooling
 Closed-loop material flow monitoring
 Inline material metering
 Bar code program selection
 Conveyor auto width adjust
 Low level material sensor
 Valve and / or material heating



Measurements in inches