

SimpleCoat & SimpleCoat TR

Selective Conformal Coating Systems

Cost-effective Solutions for Conformal Coating

Conformal Coating Systems

- SimpleCoat - basic model
- SimpleCoat TR - with tilt and rotate

SimpleCoat and SimpleCoat TR are ideal for selective conformal coating and dispensing applications that require a high level of accuracy and repeatability. They are both ideal solutions for medium and low volume. A **stand-alone configuration** is available for manufacturing that does not require a conveyor.

Some applications require coating on products with a complex geometry. For these types of products, a standard top-down coating may be insufficient. The **tilt and rotate model** - SimpleCoat TR - allows the spray valve to be tilted $\pm 45^\circ$ and rotated $\pm 90^\circ$ to reach four sides of a product.

Tilt and Rotate Spray Valve



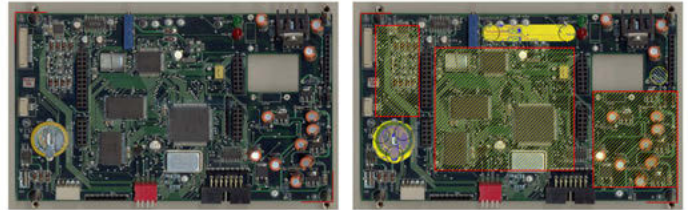
Both models are equipped with a robust 3-axis motion platform that, in the base configuration, includes a spray valve and a needle valve. An optional volumetric pump may be used in place of the needle valve.

Fluid is supplied to the dispense valves via external reservoirs. Level detects, as well as large reservoirs, are available.

The stainless steel surfaces of the work area are easily cleaned in the event of a spill. An exhaust port, located below the work surface, maintains a minimal fume level. A flow sensor in the exhaust port inhibits operation if exhaust flow drops below a set level.

Software is installed on a user-supplied laptop computer. Programming is easy and can be done either by manually teaching a program or by using a JPG image. All dispense and motion parameters can be easily altered with the easy-to-use user interface. Standard patterns for coating of line, dot, and various area fill shapes are available.

Programming via JPG image (before and after).



Standard Features

- Reliable XYZ Motion System
- Full-featured Programming, including Teach from .JPG
- Inline Operation with SMEMA Communication
- Spray and Needle Valve
- Purge and Solvent Cups
- Stainless Steel Surfaces
- Bottom Side Fume Extraction with Exhaust Flow Sensor
- External Reservoirs for Fluid Feeding
- Internal Black Light for Coating Inspection
- Keyed Maintenance Mode
- Light Tower

Needle Valve Dispense



Solvent Cups



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Options

COMMON OPTIONS*	DESCRIPTION
Low Level Material Sensor	Detects fluid level in reservoir
External Pail with Scale Level Sense	Large volume reservoir
Volumetric Pump	Alternative to needle valve.
Multiple Reservoirs	Easy fluid exchange.

* Contact GPD Global about additional options and features.

Specifications

Capacity

Dispense valves Up to 2 valves
 Spray valve* Tilt $\pm 45^\circ$, Rotate $\pm 90^\circ$
 *Tilt and rotate functions are available on SimpleCoat TR model.

Motion Control

XYZ Axis Drive Stepper motors plus ball screw
 XYZ Repeatability 50 μm (0.002")
 Speed 350 mm (13.78") per second

Coating Area

Clearance 100 mm (4")
 Work Area (X, Y, height):

	SimpleCoat (Basic model)	SimpleCoat TR (with Tilt & Rotate)
XYZ Travel with two valves	430 mm x 430 mm x 50 mm (17" x 17" x 2")	394 mm x 394 mm x 50 mm (15.5" x 15.5" x 2")
XYZ Travel with spray valve only without tilt and rotate	457 mm x 430 mm x 50 mm (18" x 17" x 2")	457 mm x 394 mm x 50 mm (18" x 15.5" x 2")

Conveyor

Conveyor Type Pin Chain
 Edge Clearance 6 mm (0.25")
 Transport Height 940 mm - 965 mm (37" - 38")
 Communication SMEMA
 Conveyor Width:

	SimpleCoat (Basic model)	SimpleCoat TR (with Tilt & Rotate)
Minimum conveyor width	50 mm (2")	
Maximum conveyor width	430 mm (17")	394 mm (15.5")

Facility Requirements

Air Supply 6 bar 85 PSI dry clean air
 Exhaust Port minimum 250 CFM, 127 mm (5") diameter
 Power 110/220 VAC, 50/60 Hz

Dimensions & Weight

Footprint (W x D x H) 1.0 m x 1.40 m x 1.55 m (39.37" x 55.12" x 61.02")
 Weight 275 kg (605 lbs)

Operating Control

Minimum requirements Customer-supplied laptop with Ethernet connection and Windows® 7 or newer.

CE Certification

Optional: Multiple Reservoirs with Level Detect.



Optional: Volumetric Pump



Tilt and Rotate

