

# Select Coat® SL-940 Series

## Powerful Process Control for Conformal Coating

### Features and Benefits

- Integrated process controls ensure high-quality wet dispense performance
- Automated batch or in-line processing
- The modular design accommodates future production needs
- Easy Coat® software – allows programmers to set, measure, record, and trace process parameters
- Offline and online programming
- Choose from a wide range of options – to improve statistical process control, production uptime, and yield
- Downdraft air management system safely removes VOCs – meeting Low Flammable Limits (LFL) standards
- Designed for easy maintenance – stainless steel surfaces are easy to clean and resistant to strong agents

Nordson ASYMTEK's Select Coat SL-940 Series conformal coating system is designed to provide the highest quality and productivity for automated batch or in-line processing. The system's robust feature set is built upon ASYMTEK's unmatched industry expertise in fluid dispensing and conformal coating process control. The result is a coating solution that simplifies the complexities of conformal coating while elevating the art of coating complex surfaces.

The SL-940 standard system features a batch-style configuration that includes a PCB/frame holder for single part- and batch-coating applications. The system can carry up to three applicators and you can choose from a variety of additional options to upgrade the SL-940 into a fully automated in-line solution.

The feature-rich, Easy Coat software is specifically designed for conformal coating applications – process parameters are set, measured, recorded and



traceable. Process history for all control parameters can be maintained in log files. Creating programs using ASYMTEK's optional vision system further simplifies the process and the optional pattern recognition software can automatically align the part and check for skip marks.

Options that provide higher levels of statistical process control are also available. Fluid and air pressure can be set and monitored through software-controlled electronic valves. Options such as Laser Fan Width Control, Viscosity Control, Bar Code readers, and Flow Monitoring can be added to further maximize production uptime and yield.

Product handling options can be added to optimize equipment performance to support your requirements. The standard SL-940 configuration allows you to integrate your own custom handling. Other options include batch tooling or single- or dual-lane conveyor systems with choice of regular or heavy-duty capabilities.

# Select Coat® SL-940 Series Specifications and Facility Requirements

## Motion System

Type:	Closed-loop servo motors with encoders
X-travel:	500 mm
Y-travel:	525 mm
Z-travel:	100 mm maximum
Encoder Resolution:	0.005 mm. (0.0002 in.)
X-Y Velocity:	1.0 m/s (39.4 in./s)
X-Y Acceleration:	1 g peak with S-curve jerk control
Z-Axis Velocity:	250 mm/s (10 in/s)
X-Y Repeatability:	0.025 mm. (0.001 in.), 3 sigma
Z-Axis Repeatability:	0.025 mm. (0.001 in.), 3 sigma
X-Y Resolution:	0.010 mm. (0.0004 in.), 3 sigma
Z-Axis Resolution:	0.025 mm. (0.001 in.), 3 sigma
Positional Accuracy:	0.075 mm. (0.003 in.), 3 sigma

## Dispense Area

Dependent upon system configuration. Contact Nordson ASYMTEK for specifics.

## Conveyor

In-line:	Standard chain conveyor
Motor driven width adjustment:	35 to 475 mm (1.4 to 18.7 in.)
Maximum clearance:	100 mm (4 in.) above and below PCB
Maximum pallet/PCB weight:	5 kg (11 lbs.) [Optional: 7 kg (15 lbs.)]

## Adjustable Tooling Rails

Aluminum extrusion profile:	The rail spacing is adjusted by moving the back rail
Width adjustment:	35 to 475 mm (1.4 to 18.7 in.)
Maximum clearance:	100 mm (4 in.) above and below PCB
Maximum pallet/PCB weight:	7 kg (15 lbs.)
Tooling plate is also available:	Aluminum; 5 mm (0.2 in.) thickness; 508 x 508 mm (20 x 20 in.)

## Computer

Computer:	Laptop computer
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## Software

User environment:	Easy Coat® software
Operating system:	Windows® 7 software

## Fluid Delivery Methods

### Precise Non-Atomized Conformal Coating Application:

Select Coat® SC-104/105 film coater (heated, circulating)  
Select Coat® SC-204/205 film coater (non-circulating)  
Select Coat® SC-280 film coater (circulating and non-circulating)

### Versatile Coating in Three Modes:

SC-200 Swirl Coat® applicator  
SC-300 Swirl Coat® applicator

### Highly Selective, Precision Jet Coating:

SC-400 PreciseCoat® jet

### Versatile Valves:

DV-0x series

## Facilities Requirements

### System footprint:

1000 mm width x 1329 mm depth (39.3 x 52.3 in.)  
Computer keyboard/monitor occupy additional 527 mm (20.7 in.) in the front

Lower door requires 855 mm (33.7 in.) clearance to open in the front  
1000 mm clearance in the rear is recommended

*Dimensional diagrams on next page.*

Air supply: 620 kPa (90 psi. 6.2 Bar), up to 0.34 m<sup>3</sup>/min (20.4 m<sup>3</sup>/hr 12 SCFM) max depending on configuration

Ventilation, air: 340 m<sup>3</sup>/hr (200 SCFM)  
@ 25.4 mm (1.0 in.) water column

Optional, nitrogen source:  
410 kPa (60 psi, 4.1 Bar) @ 0.014 m<sup>3</sup>/min (0.84 m<sup>3</sup>/hr 0.5 SCFM); required for moisture sensitive materials

Main power: 200/240 VAC, 10 A (max), 50/60 Hz  
*Note: System can run on 120 VAC without heater option installed.*

Noise: Peak ≤ 76.0 dBA; Average ≤ 70.7 dBA

System weight: 426 Kg (940 lbs.) max

Standards compliance: SMEMA, CE, NFPA, and SEMI

## Standard Features for SL-940

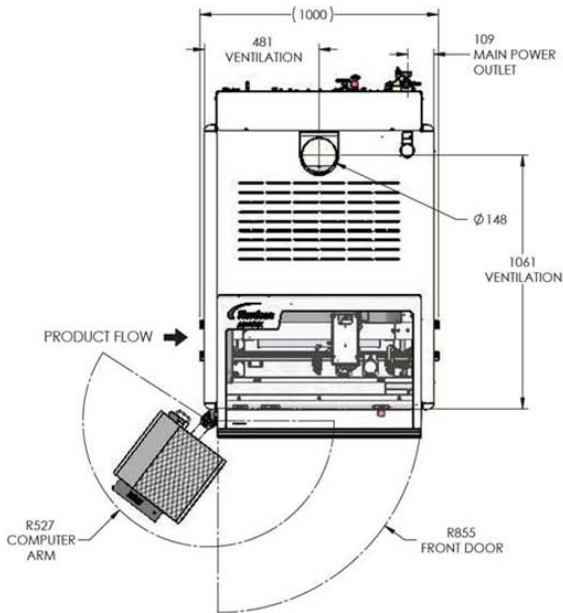
Applicator fluid and air pressures are software-controlled  
Solvent-purge station with cups  
Door interlock controls  
Downdraft ventilation with redundant safety vent switch  
Stainless steel interior  
Front access hatch with glass  
Computer arm adjustable in height and right/left orientation  
Easy Coat software

## Featured Options

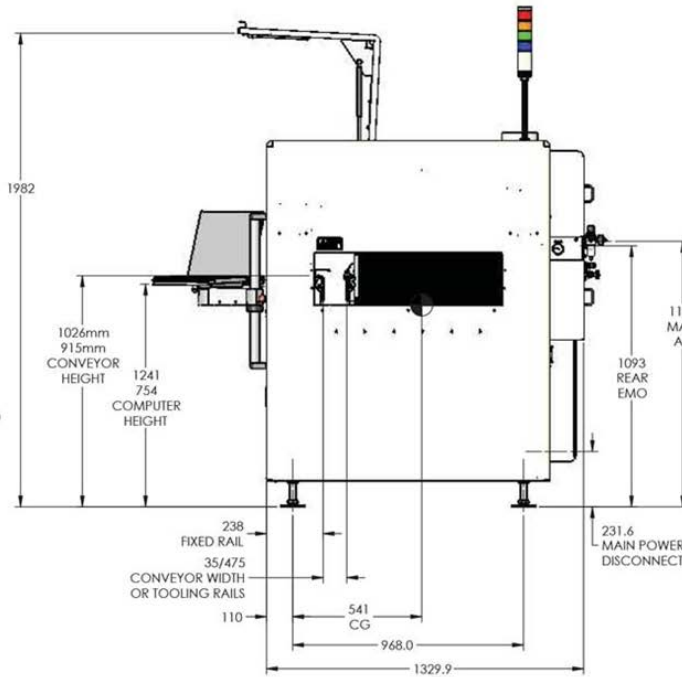
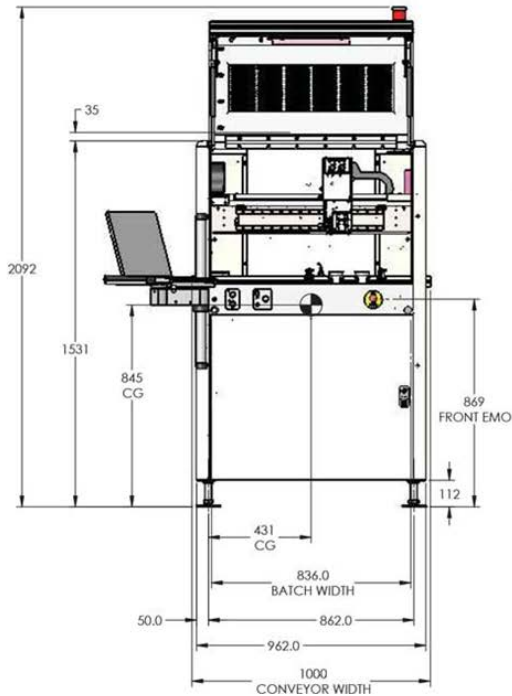
Bar code recognition system, 1D or 2D  
Black light  
Board presence sensor  
Dual-simultaneous applicator capability  
Dual-simultaneous programmable pitch  
Dual-toggle applicator capability  
Flow meter  
Laser Fan Width Control (for SC-104/105, -204/205, and -280)  
Laser pointer programming tool  
Fiducial find camera  
Solvent cup with fluid level sensor  
Low fluid sensor  
Low fluid scale  
Material change over (manual)  
Pre-queue board station  
Programming camera  
Four-position tilt (for SC-300 and -400)  
Fifth-axis tilt (for SC-104/105, -204/205, and -280)  
Light beacon  
Factory Information System (FIS): contact your sales representative

# Select Coat® SL-940 Series Dimensions

Dimensions are in millimeters



NOTE: ILLUSTRATION SHOWS SL-940 WITH BEACON AND CONVEYOR OPTIONS



Specifications and dimensions subject to change. Contact Nordson ASYMTEK for more detailed drawings if required.

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