

# Select Coat® SL-940E / SL-941E

Powerful process control for conformal coating

## Features and Benefits

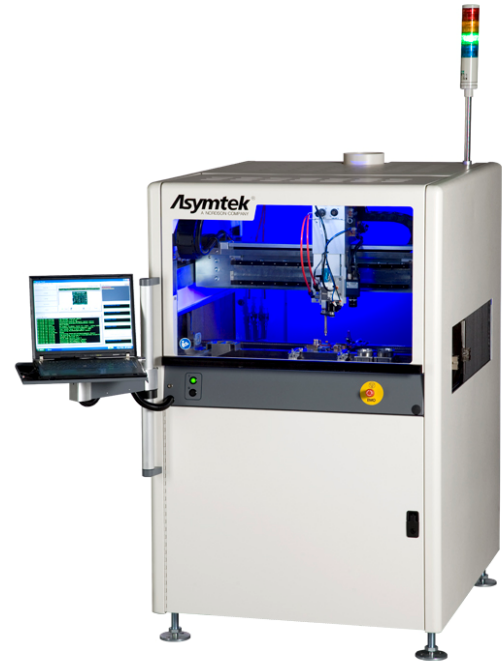
- **High-speed, high-accuracy coating system delivers higher productivity**
- **Powerful process controls ensure coating quality, such as Fan Width Control that automatically adjusts for viscosity variations during the coating process**
- **Advanced monitoring allows for traceability**
- **Programming is made easier with the optional camera**
- **Optional pattern recognition system permits confirmation of accurate coating pattern positioning**
- **Downdraft ventilation provides an efficient path for VOC removal**
- **Designed with stainless steel surfaces, the system is easy to clean and resistant to strong agents**

The Nordson ASYMTEK Select Coat® SL-940 Series conformal coating system is designed to provide the highest quality and productivity for automated coating processes. Model SL-940E is conveyORIZED for in-line production, while model SL-941E is non-conveyORIZED for batch and single-piece demand flow production environments.

The SL-940E and SL-941E are high-speed, high-accuracy coating systems with integrated, closed-loop process control that ensures superior coating quality. Process parameters are recorded and traceable through Easy Coat® (ECXP) software running on Windows XP® operating system.

Fluid and air pressure are set and monitored through software-controlled electronic regulators. A complete process history can be maintained in ECXP log files for these critical parameters.

A wide range of process parameters can be monitored for statistical process control, including Nordson ASYMTEK's Laser Fan Width Control, Viscosity Control System, Bar Code System, and



Flow Monitoring. The processes are automatically maintained within limits and process status is logged for traceability. This information can be exchanged with customer-specific Factory Information Systems (FIS).

ECXP software, together with an optional vision system, makes teaching your coating program much easier. Pattern recognition software is also available.

Productivity is maximized with ECXP software and machine design. The SL-940E and SL-941E systems operate at 1g peak accelerations, are capable of velocities of 1 meter per second, and can accommodate product sizes up to 500 mm.

The SL-940E/SL-941E has been independently tested and certified for compliance with relevant safety standards including CE, NFPA, and SEMI.

# Specifications: Select Coat® SL-940E / SL-941E

## Motion System

Type: Closed loop servo motors  
X-Y velocity: 1000 mm/s (39.4 in./s) maximum  
X-Y acceleration: 1g peak with S-curves  
Z-axis velocity: 250 mm/s (10 in./s)  
X-Y repeatability:  $\pm 0.025$  mm (0.001 in.), 3 sigma  
Z-axis repeatability:  $\pm 0.025$  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:  $\pm 0.075$  mm (0.003 in.), 3 sigma

## Dispense Area

In-line: 500 x 440 mm (19.7 x 17.3 in.)  
With solvent-purge station and/or LFWC:  
500 x 440 mm (19.7 x 17.3 in.)  
With solvent-purge station, LFWC and teach camera:  
412 x 440 mm (16.2 x 17.3 in.)

*Note: Dual-toggle applicators reduce the total dispense area per individual head. Contact factory for specifics.*

## Conveyor for SL-940E Model

In-line: Standard chain conveyor with queue stop and pinning set.  
Manual width adjustment from 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 for SL-941E

Aluminum extrusion. The rail spacing is adjusted by moving the back rail.  
Width adjustment from 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 for SL-941E. Aluminum;  
5 mm (0.2 in.) thickness; 508 x 508 mm (20 x 20 in.).

## Computer

Computer: Laptop computer, Pentium® processor  
User interface: Monitor and keyboard

## Software

User environment: Easy Coat® for Windows® XP  
Operating system: Windows® XP

## Fluid Delivery Methods

SC-104 or SC-105 Viscosity Control System (non atomizing, heat circulating system)  
SC-204 or SC-205 Film Coater (non-atomizing system)  
Swirl Coat® SC-300 Applicator: Three-mode swirl system  
PreciseCoat® SC-400 Jet Applicator: High selectivity application

## Facilities Requirements

### System footprint:

1000 mm width x 1329 mm depth (39.3 x 52.3 in.)  
Computer keyboard and monitor occupy additional 527 mm (20.7 in.) in the front  
Lower door requires 855 mm (33.7 in.) opening space 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 (12 SCFM) max. depending on configuration

Ventilation, air: 17 m<sup>3</sup>/min @ 25.4 mm water column (600 SCFM @ 1.0 in. water column)

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

Mains power: 200/240 VAC, 10 A (max), 50/60 Hz

Noise: Peak:  $\leq 76.0$  dBA ; average  $\leq 70.7$  dBA

System weight: 426 Kg (940 lb) max.

Standards compliance: SMEMA, CE, NFPA, and SEMI

## Standard Features

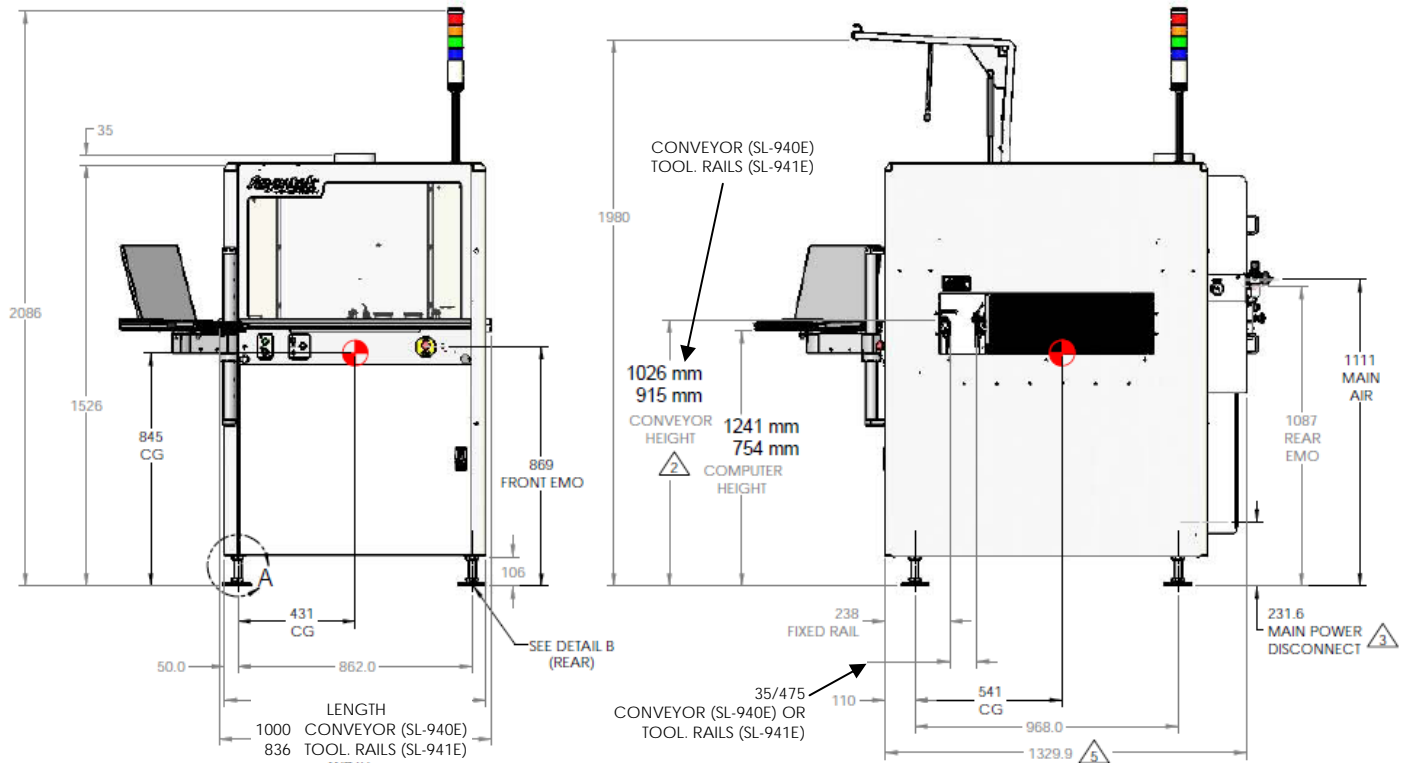
Applicator fluid and air pressures are software-controlled  
Solvent-purge station with cups  
Door interlock controls  
Light beacon  
Downdraft ventilation with redundant safety vent switch  
Stainless steel interior  
Front access hatch with glass  
Computer arm adjustable in height and right/left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

## Options

Bar code recognition system, 1D or 2D  
Black light  
Board presence sensor  
Dual simultaneous applicator capability  
Dual toggle applicator capability  
Flow meter  
Laser Fan Width Control (for SC-104/5-204/5)  
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),  
Tilt and rotate for SC-104/204  
Factory Information System (FIS):  
contact your sales representative.

# Dimensions: Select Coat® SL-940E / SL-941E

Dimensional drawings for Models SL-940E and SL-941E: all dimensions in millimeters



## Inside view of SL-941E



**For more information,  
speak with your local  
representative or  
contact your regional  
office.**

[Nordsonasymtek.com](http://Nordsonasymtek.com)

**North America**

*Headquarters*  
Carlsbad, CA, USA  
+1.760.431.1919  
[info@nordsonasymtek.com](mailto:info@nordsonasymtek.com)

**China**

Shanghai  
+8621.3866.9166  
[info@asymtek.cn](mailto:info@asymtek.cn)

Beijing  
+8610. 8453.6388  
[info@asymtek.cn](mailto:info@asymtek.cn)

Guangzhou  
+8620.8554.0092  
[info@asymtek.cn](mailto:info@asymtek.cn)

**Europe**

Maastricht, Netherlands  
+31. 43.352.4466  
[cs.europe@asymtek.com](mailto:cs.europe@asymtek.com)

**Japan**

Tokyo  
+81.3.5762.2801  
[Info-jp@nordsonasymtek.com](mailto:Info-jp@nordsonasymtek.com)

**Korea**

Seoul  
+82.31.765.8337  
[info@nordsonasymtek.com](mailto:info@nordsonasymtek.com)

**India**

Chennai  
+91. 44.4353.9024  
[info@nordsonasymtek.com](mailto:info@nordsonasymtek.com)

**S.E. Asia/Australia**

Singapore  
+65.6796.9514  
[info@nordsonasymtek.com](mailto:info@nordsonasymtek.com)

**Taiwan**

+886.229.02.1860  
[info@nordsonasymtek.com](mailto:info@nordsonasymtek.com)

**Nordson ASYMTEK**  
**+1.760.431.1919 Phone**  
**[info@nordsonasymtek.com](mailto:info@nordsonasymtek.com) Email**  
**2747 Loker Avenue West**  
**Carlsbad, CA USA 92010-6603**  
**[www.nordsonasymtek.com](http://www.nordsonasymtek.com)**

Published 2010-12-16

