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® software running on Windows® operating system.

Fluid and air pressure are set and monitored through software-controlled electronic regulators. A complete process history can be maintained in Easy Coat® 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).

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

Productivity is maximized with Easy Coat® 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: ± 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 ± 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:

420 x 440 mm (16.5 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 Motor driven 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

Software

User environment: Easy Coat® for Windows®

Operating system: Windows®

Fluid Delivery Methods

SC-280 Film Coater

SC-104 Viscosity Control System

(non atomizing, heated recirculating system)

SC-204 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 m³/min

(20.4 m³/hr 12 SCFM) max depending on

configuration

Ventilation, air: 340 m³/hr (200 SCFM)

@ 25.4 mm (1.0 in.) water column

Ventilation, nitrogen source:

410 kPa (60 psi, 4.1 Bar) @ 0.014 m³/min (0.84 m³/hr 0.5 SCFM); required for moisture

sensitive materials

Mains power: 200/240 VAC, 10 A (max), 50/60 Hz Note: System can run on 120 VAC without heater option installed. Noise: \leq 76.0 dBA (peak); \leq 70.7 dBA (average)

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-104/204)

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

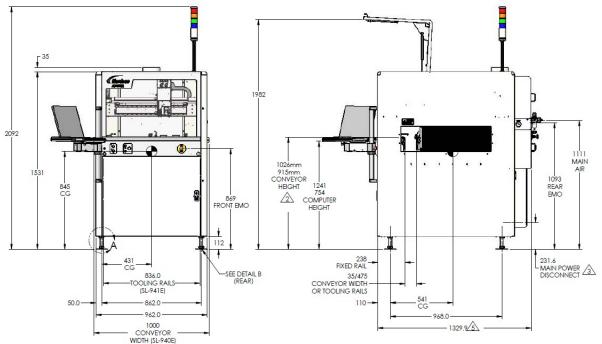
Four-position tilt (for SC-300) Tilt and rotate for SC-104/204

Factory Information System (FIS): contact your sales representative



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

Dimensions are in millimeters



Specifications and dimensions subject to change. Contact Customer Support for more detailed drawings if required.



Inside view of SL-941E

Nordson ASYMTEK +1.760.431.1919 Phone info@nordsonasymtek.com Email 2747 Loker Avenue West Carlsbad, CA USA 92010-6603 www.nordsonasymtek.com

Published 2015-02-04

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

Nordsonasymtek.com

North America

Headquarters
Carlsbad, CA, USA
+1.760.431.1919
info@nordsonasymtek.com

China

Email: <u>china-</u> <u>info@nordsonasymtek.com</u>

Shanghai

+86.21.3866.9166

Beijing

+86.10.8453.6388

Guangzhou

+86.20.8554.9996

Europe

Maastricht, Netherlands +31. 43.352.4466 cs.europe@asymtek.com

Japan

Tokyo +81.3.5762.2801 Info-jp@nordsonasymtek.com

Korea

Seoul +82.31.765.8337 info@nordsonasymtek.com

India

Chennai +91. 44.4353.9024 info@nordsonasymtek.com

S.E. Asia/Australia

Singapore +65.6796.9514 info@nordsonasymtek.com

Taiwan

+886.229.02.1860 info@nordsonasymtek.com

