Select Cure® UV-9 Cure Oven

For Conformal Coating Applications

Features and Benefits

- Oversized lamp ensures uniform intensity profile
- Adjustable power levels
- Runs cooler to extend the life of electronic components
- Will not interfere with wireless networks
- Low maintenance and easy to operate
- Optional top and bottom side curing of materials up to 420 mm (16.5 in.)
- Optional closed-loop monitoring of lamp power to ensure consistent curing
- Software tracking of lamp life through the Select Coat[®] SL-940 conformal coating system

Nordson ASYMTEK's Select Cure UV-9 inline oven is ideal for top and bottom material curing in mid- to high-volume production environments. Using ultraviolet light as the primary curing method, the oven is optimized to cure parts up to 420 mm in size.

The heart of the UV-9 cure system is in the arc lamp technology with adjustable UV intensity. It is combined with a unique ventilation design that dissipates heat generated from the UV lamp. This combination keeps the temperature and rate of rise at acceptable levels while maximizing production and lamp lifetime as the lamps run cooler.

An optional closed-loop feature ensures process reliability and compensates for the eventual lamp degradation by measuring and adjusting power levels for UVA. Therefore, the desired profile is maintained within +/- 5% of the programmed specifications. Other options and lamp types are available to further ensure that the oven meets customer specific needs while maintaining high performance. The design features one oversized lamp that spans the entire width of the oven which produces a uniform intensity profile across the part. Three lamp modules are available: 420 mm (120W/cm); 220 mm (140W/cm); and 220 mm High Power (200W/cm).



Additionally a standard SMEMA-compatible chain conveyor with 5-mm pins enables the processing of boards and is easily integrated with any dispensing or coating system. The conveyor can be configured for either left-to-right and right-to-left flow with electical width adjustment.

	Arc Lamp 505 mm		
Focal Length	100 mm (3.94 in.) standard		
Length (board width)	Optimized for 420 mm (16.5 in.)		
Power	100 W/cm (254 W/inch)		
Lamp Options	 Standard = Mercury-doped lamp (optimized for UVC) Mercury-Iron (rich in UVA) Mercury-Gallium (broadband output along all wavelengths) Others available upon request 		



Select Cure® UV-9 Cure Oven Specifications

1400 x 1200 x 1526 mm

(55.12 x 47.24 x 60.1 in.)

Oven not ready (start-up,

SMEMA no ready etc.)

for production pending

on up-stream SMEMA

cooling down, downstream

Lamp in stand-by mode, but ready

2086 mm (82.13 in.)

including beacon

68 dB @ 1 m

Alarm

Run

General

Dimensions:

Noise level:

Light Tower

<u>3-Light</u>	Configuration	ı with	<u>buzzer</u>
----------------	---------------	--------	---------------

Red: Orange solid:

Green flashing:

Green solid:

Conveyor

Type: Chain conveyor with 5-mm pins Component clearance: 100 mm top and bottom 920 to 1000 mm Conveyor height: (36.22 to 39.37 in.) Conveyor speed: 300 to 1500 mm/min (1-4.92 ft/min) Conveyor width: 50 to 420 mm (1.97 to 16.54 in.) Conveyor length: 1400 mm (55.12 in.) Maximum load: 4Kg/m (2.69 lbs/ft) evenly distributed

Exhaust/Ventilation

10.83 m3/min @ 40 mm WC, 250 mm exhaust duct (382.5 SCFM @ 1.57 in. WC, 10 in. exhaust duct)

Facilities Requirements

Weight: Power:	250 kg (551 lbs) (approximate) 400VAC 3 phases			
	Single sided Double sided			
Voltage	400 V AC	400 V AC		
Phases	3	3		
Mode	N+EARTH, TT or TN	N+EARTH, TT or TN		
Power rating	7.5 KW	14 KW		

Note: other power configurations available. Air supply (for shutters): 5 bars (73 psi) max.

Other Standard Features

Integrated operator interface on coating or dispensing system Software-controlled conveyor width adjustment Light beacon Exhaust control Door and safety interlocks E-stop SMEMA compatible conveyor

Options

Close-loop UVA lamp regulation Traffic control Board counter Board jam detection (entry and exit) Automatic width adjust for conveyors Right to left conveyor direction Heavy-duty conveyor: 8Kg/m (5.38 lbs/ft) evenly distributed Reduces maximum conveyor width to 400 mm (1.3 ft) Traceability software Entrance conveyor covered extension Exit conveyor covered extension Recipes and data log storage Touch screen for oven monitoring and control Special paint Dual-lane conveyor Iron-doped lamp Gallium-doped lamp Power packs for different power configurations Inlet and outlet shutters (air supply required) 220 mm lamp (140W/cm) 220 mm lamp (200W/cm)

Additional options are available: contact Nordson ASYMTEK for further information.



Select Cure[®] UV-9 Cure Oven

SIMATIC WinCC flexible Runtime						
Control	Top Lamp		Bot Lamp	My oven		
Recipes	RPP					
Alarms	Top lamp		Energy (mJ)	1300	1316	
Aldrins			Op (%)		82	
Start	Bottom		Energy (mJ)	1000	1009	
Stop	lamp		Op (%)		59	
	Track A	Sp	eed (cm/mn)	100	100	
			Pcb		0	
	Track B	Sp	eed (cm/mn)	100	100	
			Pcb		0	

Software interface for Select Cure UV-9 Cure Oven



Select Cure UV-9 Cure Oven in line with a Nordson ASYMTEK SL-940 coating system

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

Published 2016-08-12

Page 3 of 3

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

