

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 electrical 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	<ul style="list-style-type: none">• 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

General

Dimensions: 1400 x 1200 x 1526 mm
(55.12 x 47.24 x 60.1 in.)
2086 mm (82.13 in.)
including beacon

Noise level: 68 dB @ 1 m

Light Tower

3-Light Configuration with buzzer

Red: Alarm

Orange solid: Oven not ready (start-up, cooling down, downstream SMEMA no ready etc.)

Green flashing: Lamp in stand-by mode, but ready for production pending on up-stream SMEMA

Green solid: Run

Conveyor

Type: Chain conveyor with 5-mm pins

Component clearance: 100 mm top and bottom

Conveyor height: 920 to 1000 mm
(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: 250 kg (551 lbs) (approximate)

Power: 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

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

Software interface for Select Cure UV-9 Cure Oven

For more information, visit our website to locate your local representative or contact your regional office:

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Shanghai
 Beijing
 Guangzhou
 Taipei

EMEA

Deurne, Netherlands

S.E. Asia/Australia

Singapore

Korea

Seoul

Japan

Tokyo

India

Chennai



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

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