

# PRECISIONCURE UVC (MUV) MICROWAVE UV CURING SYSTEM

The SCS PrecisionCure UVC microwave UV curing system elevates manufacturing operations with its programmable curing profiles and compact design that optimizes valuable production floor space. Available in two sizes, 46 inches (single-sided curing only) and 80 inches (single or double-sided curing), both ovens can accommodate boards up to 28 inches long while utilizing inlet/outlet shutters.

Equipped with Heraeus Noblelight® microwave-activated UV lamps, the industry standard in microwave UV curing technology, the PrecisionCure UVC (MUV) ensures superior curing performance. The system includes Windows®-based software and a user-friendly touchscreen monitor, streamlining operation and monitoring of the curing process. Engineered for continuous operation, the curing system minimizes downtime for maintenance and increases overall production efficiency. Additionally, the unit can function as a standalone system or fully integrate with an SCS PrecisionCoat selective conformal coating and dispense system and/or an SCS PrecisionAdvance conveyor to provide a comprehensive solution.

The 46-inch PrecisionCure UVC (MUV) features the smallest footprint in the industry and a patent-pending lamp movement trolley that allows the UV lamp(s) to move across the horizontal axis over a product on the conveyor. Users can also customize each profile to vary the dosage of UV exposure on different components of a single board as well as the number of lamp passes. The advanced lamp travel technology coupled with programmable curing profiles provide users with unparalleled control over the curing process.



80-inch PrecisonCure UVC (MUV)

#### **FEATURES**

- · Heraeus Noblelight microwave-activated UV lamps
- · Programmable curing profiles
- Single-sided (1 to 3 lamps) and double-sided configurations (2, 4 or 6 lamps)
- 6.6-inch, 13.2-inch and 19.8-inch irradiation widths available
- · Pin-type-edge handling conveyor
- · Left to right conveyor travel
- · Auto width adjust
- 5-inch top and bottom pass-through clearance
- Lamp movement trolley (46-inch single-sided system only)
- · Adjustable lamp height
- Pneumatically-operated inlet/outlet shutters
- · Windows-based software with touchscreen display
- · Integrates with PrecisionCoat software
- Lamp maintenance and magnetron timers
- Lamp life management
- Front and rear access to unit
- · Interlocked exhaust sensor
- Inlet air filtration system
- · SMEMA interface

### OPTIONS

- H (mercury) or D (iron) bulbs
- · Right to left conveyor travel
- · Integrated exhaust fan
- · Tower light
- IPC CFX communications
- IPC HERMES communications



## SCS PRECISIONCURE UVC (MUV) SPECIFICATIONS

#### Single Sided System (46- or 80-inch)

#### Double Sided System (80-inch)

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	One Lamp	200-230 VAC, 50/60 Hz, 1Ø, 20A	Two Lamps	200-230 VAC, 50/60 Hz, 3Ø, 30A
Electrical	Two Lamps	200-230 VAC, 50/60 Hz, 3Ø, 30A	Four Lamps	200-230 VAC, 50/60 Hz, 3Ø, 45A
	Three Lamps	200-230 VAC, 50/60 Hz, 3Ø, 30A	Six Lamps	200-230 VAC, 50/60 Hz, 3Ø, 60A
	One Lamp	225 SCFM, 0.4 in-W.C.	Two Lamps	375 SCFM, 0.4 in-W.C.
Exhaust requirements	Two Lamps	375 SCFM, 0.4 in-W.C.	Four Lamps	675 SCFM, 0.4 in-W.C.
	Three Lamps	525 SCFM, 0.4 in-W.C.	Six Lamps	1100 SCFM, 0.4 in-W.C.
	One Lamp	6.6 in (16.7 cm)	Two Lamps	6.6 in (16.7 cm)
Lamp irradiated width	Two Lamps	13.2 in (33.5 cm)	Four Lamps	13.2 in (33.5 cm)
	Three Lamps	19.8 in (50.3 cm)	Six Lamps	19.8 in (50.3 cm)
System Dimensions (W x D x H)	46.1 x 49.2 x 72.8 in / 117 x 124.9 x 184.9 cm		80 x 48.75 x 78.25 in / 203.2 x 123.6 x 198.5 cm	
	$80 \times 48.75 \times 78.25$ in / $203.2 \times 123.6 \times 198.5$ cm			
Weight, crated	1,200 - 1,600 lb / 540 - 725 kg (46-inch system)		2,000 - 2,400 lb / 907 - 1089 kg	
	2,000 - 2,400 lb / 907 - 1089 kg (80-inch system)			

#### **System Specifications**

Conveyor type	Pin-type-edge conveyor system		
Conveyor speed (80-inch system)	0.5 to 10 in/sec / 13 to 254 mm/sec		
Lamp speed (46-inch system)	0.039 to 4.0 in/sec / 1.0 to 101 mm/sec		
Substrate width	2.5 to 20 in / 6.5 to 50.8 cm		
Substrate length	Min: 4 in / 10.2 cm Max: 28 in / 71 cm		
Drive system	Chain drive with 3/8 in pin chain		
Tunnel clearance	5 in / 12.7 cm (top and bottom)		
Air supply	80-110 psi clean dry air and/or nitrogen		
Lamp UV source	Heraeus Noblelight microwave UV lamp(s)		
Lamp output power	300 W/in / 118 W/cm		



46-inch PrecisonCure UVC (MUV)

## **INNOVATIVE SOLUTIONS FOR ADVANCED TECHNOLOGIES**

With over 50 years of experience and locations around the world, Specialty Coating Systems is the global leader in conformal coating technologies. This extensive coating and application experience is leveraged on each and every customer project, including the industry-leading systems that SCS designs and manufactures. From conformal coating, dispensing and cure systems to ionic contamination test systems, SCS equipment is used in environments that range from university and research labs to high-volume production facilities. SCS' proactive approach to production and quality requirements—testing, validating, documenting and processing—enables customers and their advanced technologies to meet the most challenging industry specifications and quality requirements.





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