



WIDECURE® Light-Curing Conveyor

Cure Larger Parts with Conveyor's 25"-Wide Belt

- 25" wide belt and 24" curing width for handling large parts
- Two bulb options (shortwave or longwave)
- Touch screen control panel
- Pre-installed and compact duct work
- Energy efficient solid-state power supply
- Adjustable lamp intensity
- Complete light containment
- Air shippable
- Powerful UV-curing lamps (Initial intensity up to 700 mW/cm²)*
- Motorized lamp height adjustment
- Line speeds from 4-30 ft/min., adjustable in 0.1 ft/min. increments
- Accurate digital speed control for repeatable cures
- Cures parts up to 18" high
- Integral vacuum hold-down and cooling system

The WIDECURE® conveyor system is designed to offer consistent, fast, and safe curing. Equipped with a 25"-wide belt, this system is ideal for curing light-curable materials on larger parts, or larger quantities of smaller parts. It can be outfitted with either a longwave (metal halide, UVA/Visible) bulb or a shortwave (mercury, UVB/UVC) bulb and delivers up to 700 mW/cm² of curing energy. Designed to help manufacturers build a more reliable cure process, the WIDECURE allows users to easily control various curing parameters through a touch-screen control panel. This feature gives users greater curing flexibility and enables them to tailor the curing conditions to their specific application. The system's tightly controlled belt speed and minimal bulb degradation also allow better control over cure. This provides repeatable curing profiles and a more reliable process with less risk of variance.

* Measured with an ACCU-CAL™ 160 UV radiometer at a lamp height of 4" using a standard metal-halide bulb.

System Features & Benefits

Fast Curing

WIDECURE conveyors offer fast UV cures. With up to 700 mW/cm² intensity at 4" distance, dosage levels of 4 J/cm² of UVA curing energy can be achieved at a speed of 5 ft/min.* The following table provides typical cure speeds for several Dymax UV light-curing applications at a 4" height setting.

Application	Cure Speed, m/min [ft/min]*
Conformal Coating (984-LVUF)	4.6 [12]
Medical Plastic Bonding (1187-M)**	7.6 [22]
Glass Bonding (429)	3.0 [7]
Industrial Plastic Bonding (3025)**	8.2 [24]
Gasketing (GA-108)	2.4 [5]

Consistent UV Curing

The system's tightly controlled belt speed helps users attain repeatable curing profiles. Its digital display shows the system's belt speed in increments of 0.1 fpm.

* Energies and cure times were measured using a metal-halide, iron-doped mercury bulb and an ACCU-CAL™ 160 UV radiometer.

** Tested on plastic with nearly 100% UV/Visible light transmission.

Touch-Screen Control Panel

The system's new touch-screen interface is a major improvement over earlier versions and makes monitoring and making adjustments to the WIDECURE quick and easy.

Quick and Easy Height Adjustment

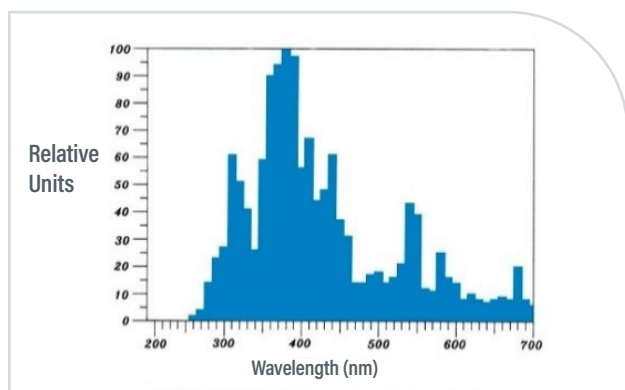
Lamp height is adjusted automatically via the touch screen and can accommodate parts up to 18" in height.

No Stray UV Light for a Safe Work Environment

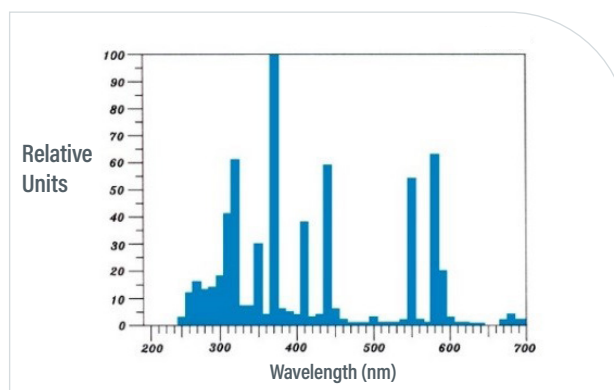
A 5'-long shroud eliminates stray UV light, while urethane curtains at the entrance and exit reduce stray visible light. The flexible urethane curtains can be modified to accommodate any specific part height.

Two Bulb Options

WIDECURE conveyors can be outfitted with either a longwave (metal halide, UVA/Visible) bulb or a shortwave (mercury, UVB/UVC) bulb. The longwave bulbs are recommended for most Dymax UV light-curable materials, while the shortwave bulbs are generally recommended for UV inks. The following charts show the spectral distribution of each type of bulb. Unless otherwise specified, systems are outfitted with longwave (metal halide) bulbs.



Spectral distribution with a metal-halide, iron-doped mercury bulb PN 41247



Spectral distribution with a mercury bulb PN 41246

Specifications

Part Numbers	<p>41245-L Standard WIDECURE® Conveyor where belt travels left-to-right</p> <p>41245-R Optional WIDECURE® Conveyor where belt travels right-to-left. Requires modification charge and additional lead-time.</p>
UV-Curing Information	
Curing Width	24" [60.96 cm]
Peak Intensity	700 mW/cm ² nominal with metal halide bulb ¹ 650 mW/cm ² nominal with mercury bulb ¹
Bulb Life	750 hours typical ²
UV Lamp Type	400 Wpi metal-halide bulb (standard) ³
Reflector Type	Focused, 4" [101.6 mm] below bottom of reflector
Belt Information	
Belt Width	25" [63.5 cm]
Belt Working Height	34"-37" [86.4 cm - 94 cm] above floor
Belt Material	Teflon-coated fiberglass
Belt Speed	4 - 30 ft/min.
Speed Control	Digitally controlled, 0.1 ft/min. resolution, 2% accuracy
Maximum Belt Load	50 lbs. [22.7kg.] total capacity
Dimensions	
Overall Dimensions (L X W X H)	113.5" x 46" x 76" [288.3 cm x 116.8 cm x 193 cm]
In-Feed Length	26.0" [66.04 cm]
Shroud Length	48.25" [122.55 cm]
Out-Feed Length	26.0" [66.04 cm]
Clearance And Lamp Height	Adjustable from 4" to 24" [10.16 cm - 61.0 cm]
Maximum Part Height	18" (45.7 cm)
Electrical Information	
System Power	480 VAC, 3Ø, 60 Hz, 30 Amp.
Air Flow information	
Cooling Air Flow	1,000 CFM rated
Blower Duct Dimensions	6" [15.24 cm] (round)
Other	
Replacement Parts	<p>41248 Replacement Belt</p> <p>41247 25" Metal Halide (standard) Bulb</p> <p>41246 25" Mercury Bulb</p>
Shipping Weight	1,250 lbs.
Lead Time	Standard Left-to-Right System - 2 weeks Optional Right-to-Left Modified System - 6 weeks

1 Measured with an ACCU-CAL™ 160 UV radiometer at a lamp height of 4".

2 Bulb life is affected by the operating environment, duty cycles, and minimum intensity requirements.

3 The system can also be outfitted with Mercury bulbs ("H" type) for UV inks and cationic formulations.



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