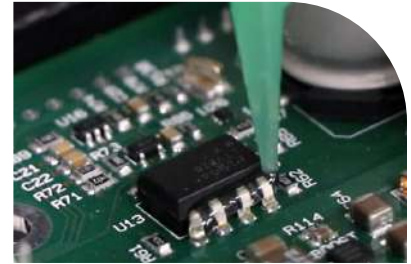
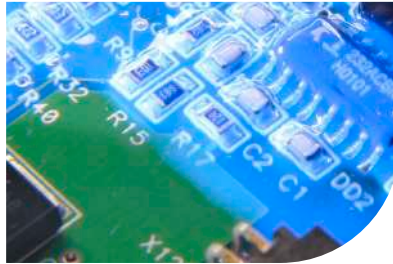


e max

PRODUCT GUIDE

EMAX Products

Dymax EMAX products are joint labeled materials developed by Dymax exclusively for Ellsworth Adhesives. EMAX products are light-curable materials that are typically used for conformal coating, electronic masking, reinforcement, ruggedization, and bonding glass and plastics.




Typical Cost Saving of Dymax Light-Curable Materials

- Cure in seconds; increase throughput
- Minimal floor space requirements
- Simple to dispense – no solvent management or mixing systems required
- No silicone containment required
- Eliminate labor costs associated with complex dispensing system maintenance and manual transferring of parts for long cure
- No secondary inspection of bond area with See-Cure technology

Environmental Benefits of Light-Curing Materials

Dymax understands that safe, ecologically friendly products benefit our customers, the environment, and us. We have created materials that minimize ecological impact. These attributes include:

- Solvent-free materials
- Halogen-free materials
- RoHS compliance
- REACH - no substance of very high concern (SVHC)
- Eco-friendly, one-component materials

Product	Typical Application	Features	Viscosity, cP	Exposure Time in Seconds (Between Glass Slides)	
				BlueWave® 200 10 W/cm ²	5000-EC 200 mW/cm ²
EMAX 776-SC	 Maskant	UV/Visible light cure; excellent surface protection; spray or dip; easy peel after exposure to heat; See-Cure technology (blue to pink)	52,000	1 s	8 s
EMAX 904-GEL-SC	 Reinforcement/ Ruggedization	UV/Visible light cure; thixotropic for minimal movement after dispense; See-Cure technology (blue to colorless)	38,000	2 s	10 s
EMAX 904-T-SC	 Reinforcement/ Ruggedization	UV/Visible light cure; thixotropic for minimal movement after dispense; See-Cure technology (blue to colorless)	8,000	2 s	10s
EMAX 906-B-REV-A	 Electronic Maskant	UV/Visible light cure; halogen, solvent, and silicone free; blue color for easy visual inspection; compatible with gold and copeer pins	115,000	3 s	10 s
EMAX 99001	 Industrial Bonder	UV/Visible light cure; moisture and high-temperature resistant; high adhesion to glass and metal	500	2 s	2 s
EMAX 99001-T	 Industrial Bonder	UV/Visible light cure; moisture and high-temperature resistant; high adhesion to glass and metal	6,000	2.8 s	2 s
EMAX 99003	 Conformal Coating	UV/Visible light cure with secondary moisture cure; thermal shock and corrosion resistant; great temperature/humidity performance; blue fluorescing; Approvals: UL 94V-0, UL 746-E, MIL-I-46058C, IPC-CC-830B	750	N/A	50 s*
EMAX 99004	 Encapsulant	UV light cure with secondary moisture cure; flexible; blue fluorescing	12,500	0.2 s	1 s
EMAX 99007	 Encapsulant	UV/Visible light cure with secondary heat cure; flexible; moisture and thermal resistance; blue fluorescing	55,000	0.6 s	1 s

*tack free time for a 0.008" [0.2 mm] coating

See-Cure Technology



See It Dispense

Dymax adhesives with patented See-Cure technology are bright blue in the uncured state. The blue color is easily visible against clear and most colored substrates, enabling simple confirmation of the quantity and location of placement.

See It Cure

As the adhesive cures, the blue color within the adhesive fades and ultimately turns clear after full cure. This serves as a visible confirmation that the adhesive has received a sufficient dose of energy to cure. There is no evidence of the blue color on the finished parts.

Dispensing & Curing Equipment

Dymax dispensing and light-curing systems are perfectly matched to our adhesives' chemistry. Our field-proven dispense solutions are designed to fit many adhesive dispensing applications and include various automatic and manual dispense systems, spray valves, and related components for seamless integration into your assembly process.

We offer a complete line of conventional and LED light-curing equipment including spot, flood, and conveyor systems, as well as radiometers for measuring light intensity. Our equipment can be configured as stand-alone units or integrated into existing manufacturing assembly lines for fast processing.

BlueWave® MX-Series Systems

BlueWave MX-Series curing systems feature all the benefits of LED-curing technology in smaller, more versatile units. These systems are uniquely designed to offer higher, more consistent curing intensity than traditional spot or flood curing systems. They are comprised of a power supply, a controller with an easy-to-use control interface, and an emitter. Emitters are available in three models, the MX-150 (spot), MX-250 (flood), and MX-275 (line) as well as in three different curing wavelengths, 365, 385, and 405 nm.



EC-Series Flood Lamps

EC-series flood-lamp systems are ideal for light curing large parts or curing many small parts simultaneously. With intensities ranging from 105-225 mW/cm², Dymax flood lamps are capable of curing most UV light-curable adhesives, sealants, and coatings, tack free in 30 seconds or less. These flood lamps can be incorporated into automated assembly systems or mounted onto conveyors. Dymax flood units can also be used as turnkey bench-top units (with optional shutters).

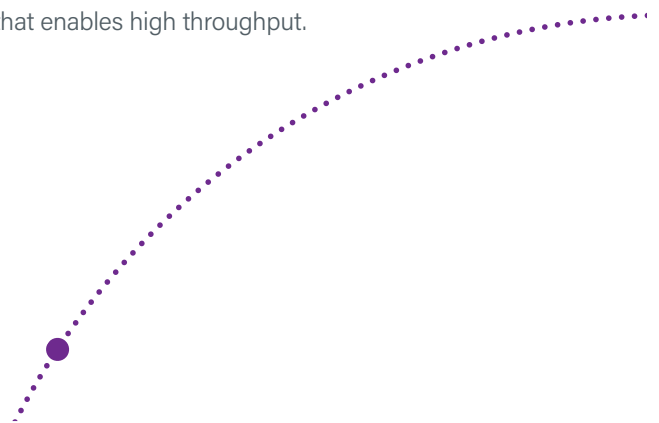
BlueWave® AX-550

The BlueWave AX-550 combines a controller, emitter, and power supply into a compact, all-in-one LED flood-curing system. Eliminating the need for a large, traditional-style controller and bulky cables, this unit has a greatly reduced footprint and is easily integrated into automated processes.

The system features a large 5" x 5" (12.5 x 12.5 cm) curing area, which is controlled by a user interface with push-button controls or through a PLC interface. Dymax offers the system with three different wavelength emitters (365, 385, and 405 nm), which are field-upgradeable by customers so they can switch to another wavelength easily if needed.

UVCS Conveyor Systems

Dymax conveyor systems use high-intensity light sources for fast curing of adhesives, coatings, inks, and encapsulants. UVCS bench-top conveyors can be outfitted with up to four UV or LED flood lamps, or for higher energy requirements, can be configured with microwave-driven light sources. All configurations have adjustable belt speeds of 1 to 32 feet per minute, and adjustable lamp-to-belt distance to address a variety of application requirements. When combined, the UVCS conveyors' consistent intensity, fast curing, and adjustable line speeds create an optimized UV-curing process that enables high throughput.



ACCU-CAL™ Radiometers

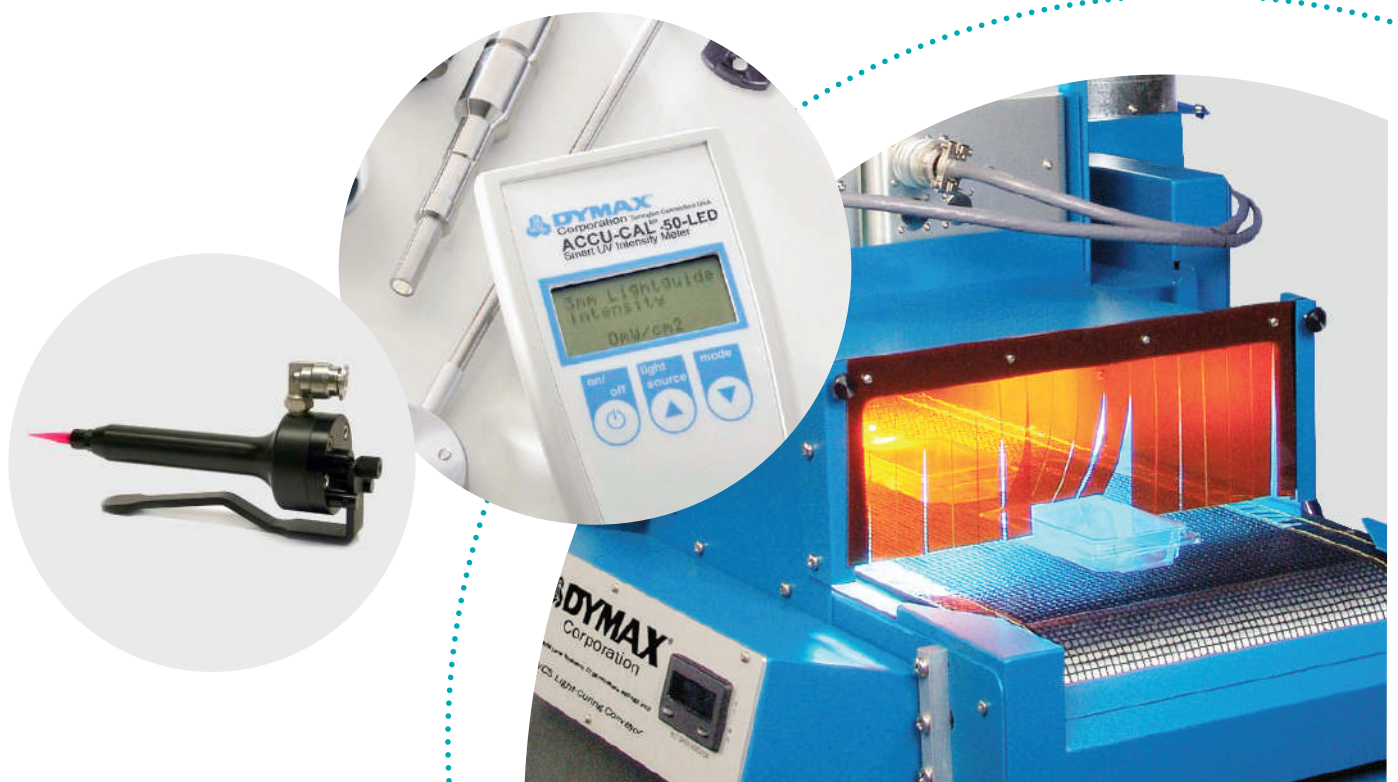
ACCU-CAL radiometers allow operators to monitor, document, and maintain a reliable light-curing process, while ensuring the system is providing the intensity and dosage levels required for successful curing. A radiometer can signal an operator to replace a curing system's degrading bulb, reflector, or lightguide to help prevent incomplete cures from happening. ACCU-CAL radiometers can also measure the intensity of stray or reflected energy and confirm that operators are properly shielded from light exposure.

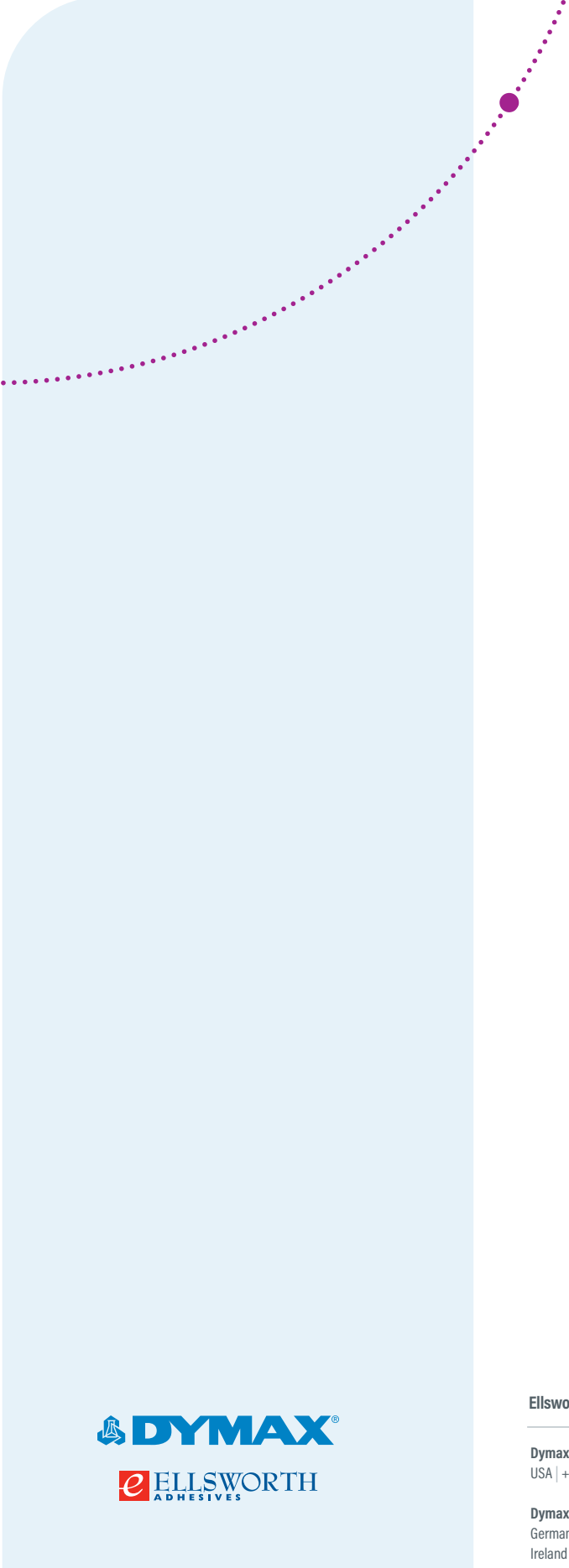
SG-150 Hand-Held Spray Gun System

SG-150 spray systems, available in standard and high-flow models, utilize a needle valve to control fluid flow and have a dual-acting air cylinder that provides immediate start/stop functionality. A stroke adjustment on the valve can be used to fine tune the flow rate and a precision air regulator/gauge assembly simultaneously activates the atomizing air while the valve is opened and fluid is flowing.

Model 200 Dispensing System

The Dymax Model 200 is a manually controlled dispensing system. Accurate dispensing is achieved through the use of a unique normally-closed, hand-held diaphragm valve. The diaphragm valve is designed with a wand-style body to make it more ergonomic for users. Dymax hand-held dispensing systems can be used for a variety of applications including dot, bead, and potting applications. Dymax hand-held fluid dispensing systems are engineered for optimal performance and long service life.





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