# Light-Curing Equipment Selector Guide



SPOTS | FLOODS | CONVEYORS | RADIOMETERS | ACCESSORIES



### DYMAX LIGHT-CURING TECHNOLOGY



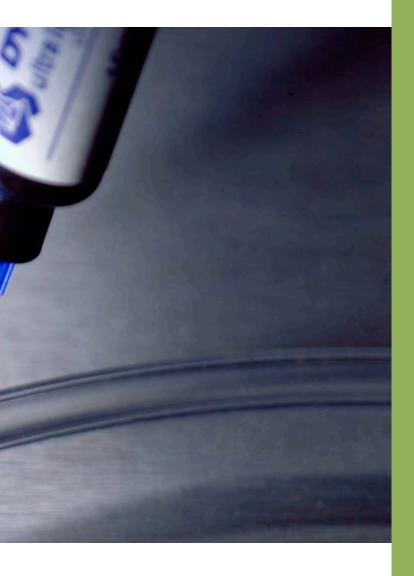
For more than 35 years, light-curing technology has allowed manufacturers to lower processing costs, produce higher quality products, and eliminate the use of harmful chemicals from the workplace. First introduced in the early 1980s for ink and thin coating applications, the technology has advanced tremendously over the last three decades, becoming the method of choice for many other industrial bonding, sealing, coating, potting, and tacking applications.

Light curing's popularity stems from its ability to deliver fast, durable bonds in seconds, on demand. Faster on-demand cures result in more efficient manufacturing processes by providing shorter cycle times, reduced labor costs, and reduced work-in progress. In addition to its efficiency, light-curing technology is also environmentally and worker friendly. It utilizes no explosive equipment, is associated with fewer

health issues, and requires lower regulatory and disposal costs than other technologies.

Dymax has specialized in light-curing assembly solutions since the introduction of the technology. Today, we offer the broadest range of light-curable materials available and a complete line of conventional and LED light-curing equipment. Our light-curing equipment offers manufacturers safe, reliable curing in a number of different configurations including spot, flood, and conveyor systems.

Where other companies only supply products, we are committed to developing a true collaborative partnership, bringing our unsurpassed expertise in light cure technology and total process knowledge to our customers' specific application challenges. Because we understand the process



as a whole, and not just individual aspects of it, we can offer our customers a solution where chemistry and equipment work seamlessly together with maximum efficiency.

Our application engineering team works side-by-side with customers, providing assistance with product and process design, testing, evaluation, and pre-production trials throughout the life of the assembly process. That's the perfect combination of technology and expertise for a competitive advantage you can't get anywhere else.

Our Technology.

Your Advantage.™

This selector guide provides an overview of Dymax light-curing systems. Additional information for all systems is available on our website at dymax.com. For answers to your specific application questions, please contact our Application Engineering team. They are available to help recommend a light-curable material and design a dispensing and curing process for your specific application. Whenever possible, our Application Engineers will also conduct testing on your specific parts to ensure the chosen products meet all application requirements. If testing indicates our standard formulations or light-curing systems are not suitable, our Application Engineers can also help you find an alternative solution for your assembly process.



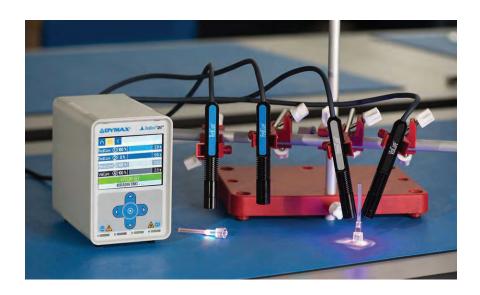
#### **Equipment Try-and-Buy Program**

Take advantage of the opportunity to evaluate our light-curing systems for two weeks free of charge through our Try-and-Buy Program. This program is a low-risk way to evaluate Dymax equipment in your application. After the two week trial period, rental of the unit will be billed on a monthly basis. Typically after 6 payments the system is yours to keep. If you're not satisfied with the system at any time, you can return it to us and end your rental. An assortment of conveyors, spot lamps, flood lamps, and focused-beam lamps have been allocated for this program for your in-house evaluation. Contact Dymax Customer Support for more information on this program.

## UV BROAD-SPECTRUM & LED SPOT-CURING SYSTEMS

Spot-cure systems deliver optimized curing energy to a very precise location. They can be used manually by an operator in a turnkey benchtop system or incorporated into a high-speed automated assembly line. They are ideal for curing small areas quickly in R&D laboratory environments as well as low- and high-volume production applications in the medical, industrial, electronics, automotive, and optical industries.

Dymax spot systems are worker friendly, utilizing an integral timed/manual closure control and typically requiring little external shielding. Dymax systems also feature a patented intensity adjustment feature which aids users in both validating and controlling the light-curing process. Dymax spot systems are designed with either arc lamp or LED energy sources.





## **Conventional Arc Lamp Spot-Curing Systems**

Dymax multi-spectrum spot lamps cure using high-pressure metal-halide lamps that produce light energy in the 300 to 450 nm range. These spot lamps can be equipped with rod lenses or single- or multiple-pole lightguides in various diameters (3, 5, and 8 mm) and lengths (up to 3 meters) for a variety of curing options.

## **LED (Light-Emitting Diode) Spot-Curing Systems**

Dymax LED spot-curing systems generate curing energy using an array of surface-mounted LEDs instead of traditional metal halide or mercury bulbs. They are semiconductor energy sources that emit very discrete wavelengths of energy, resulting in a single, narrow, bell-shaped emission spectrum.



These units offer cooler cures compared to traditional lamp-style curing systems as well as longer service life that eliminates lamp replacement and reduces maintenance costs, higher electrical efficiency and instant on/off capability that lowers operating costs, and "green" attributes that eliminate mercury and ozone safety risks and handling costs.