

ADVANTAGES OF LED CURING

LEDs, or light emitting diodes, continue to gain popularity as a replacement for traditional light bulbs, not only in homes and public buildings, but also for use with light-curable materials (LCMs). The rise of LEDs is attributed to the notable benefits attached to them, and some advantages are associated specifically with light curing.

Cooler Temperatures



LED systems operate at lower temperatures than conventional broad-spectrum lamps. Because some substrates are sensitive to higher temperatures, curing LCMs fully without damaging the substrate can require multiple passes under a broad-spectrum lamp at lower intensity levels. Those extra steps can be made unnecessary by switching to the cooler LED units.

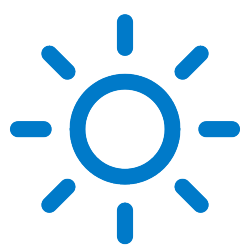
An additional advantage of LED systems' cooler temperatures is that they do not need the same level of heat extraction (exhaust), eliminating the expensive costs for installation and operation.

Longer Life



Another benefit of LED curing sources is that they last longer. Although LEDs also degrade in intensity output over time, a typical broad-spectrum spot-cure lamp might last about 2,000 hours before intensity output levels degrade to about 50% of initial levels. Conversely, LED curing units can often provide over 50% of their original intensity output much longer.

More Uniform Cures



LEDs provide a more uniform distribution of light across the cure area for more consistent results.

Instant On



LEDs power up instantly and do not require any warm-up time. This allows production to start immediately, increasing throughput.

More Energy Efficient & Environmentally Friendly



LED systems are much more electrically efficient and more environmentally friendly than mercury-arc curing lamps. The LEDs run at lower voltages and require no warm-up period, cutting electrical costs. They are also not listed as an electrical hazard the way that conventional mercury-arc lamps are.