

UV LED curing solutions are being utilized in the wood coating industry because they offer highly reliable UV curing due to being a solid-state device. They provide deep through-cure in course-grain woods and allow low surface temperatures that enable cheaper raw inputs.

What are the benefits of UV LED?

Increased Productivity

- Better yields
- Higher speeds
- Tighter process control
- Physical plant utilization
- Reduced line lengths

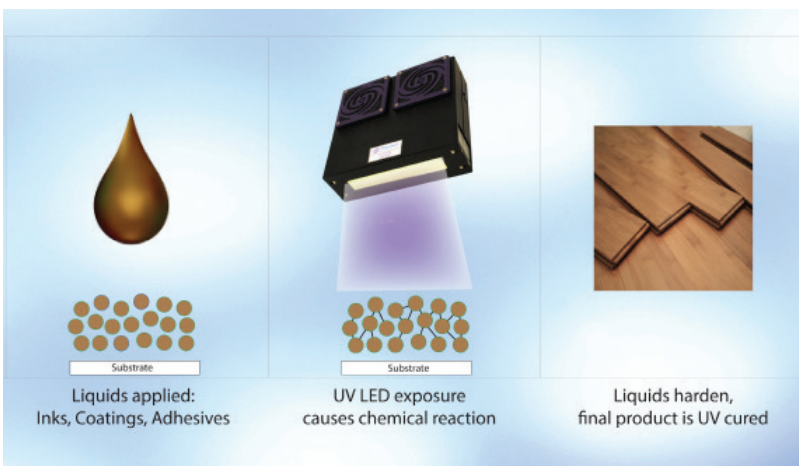
Operating Economics

- Up to 70% energy savings
- Utilize cheaper raw inputs
- Low heat
- Instant on/off - Intensity Control

Sustainability

- No ozone
- No mercury disposal
- Safer workplace
- Government subsidies

UV LED curing for wood coatings



Phoseon Technology has a variety of products ideal for wood coating that can scale to cover any conveyor width and the consistent UV output enables end users to run their production lines at maximum speeds. Phoseon's patented SLM technology provides intense UV output, while using a fraction of the power required with traditional UV arc lamps.

UV LED curing technology is ideally suited for the wood coatings industry for applications such as edge coating, roller coating and digital printing. UV LED technology drastically reduces energy consumption and significantly reduces work-piece surface temperature.

Edge Coating



Edge Coating lines utilize UV LED to ensure consistent, high-quality results. Machines can be made more compact due to small form factor; speed can be increased due to consistent UV output; and the diffuse nature of UV LED light can be used to more effectively cure shaped surfaces which previously required multiple mercury lamps at various angles.

Roller Coating



UV LED is a perfect match for roller coating lines, both for gelling and full-cure stations. The benefits include better factory floor utilization due to shorter, more efficient lines; increased uptime with no degradation in UV output, cheaper input stock due to lack of infrared heat; and reduced operating costs by more efficient electricity use and no need for costly air ducting systems.

Digital Printing



While technically not a wood application, creating a wood-grain look on diverse materials is made possible with UV LED and ink-jet printing. By using a combination of pinning and full-cure lamps, realistic 'look' and more importantly 'feel' is enabled by creating texture to mimic the grains of natural wood. This is especially valuable in decorative and accent applications.