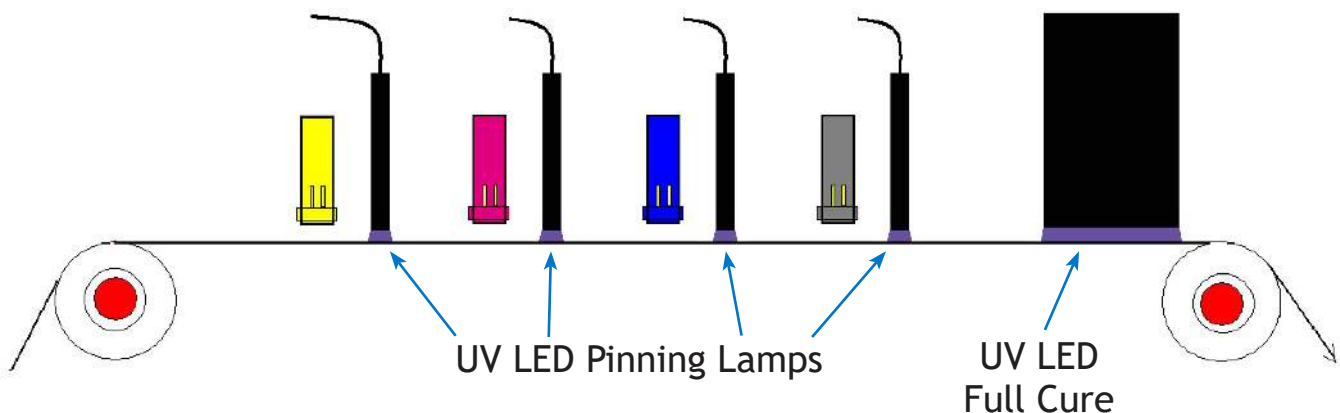


UV LED Curing for Pinning

Controlling Image Quality through Pinning

UV LEDs light sources allow digital printers to gel or freeze UV ink droplets quickly before they have time to spread out (referred to as drop or dot gain). The process of freezing ink droplets between print heads is called **pinning**. This is possible because the UV LED light sources are more compact than conventional curing systems and can be easily positioned between successive print heads. While pinning stops the drop from spreading, it leaves the ink flexible and soft enough for proper inter-coat adhesion to other ink droplets and for further handling. All pinned inks must finally pass underneath a final cure UV LED light, to finish the curing process.



Advantages of UV LED curing systems:

- ✦ Control of Dot Gain
- ✦ Low heat impact
- ✦ Instant On/Off
- ✦ Stable & predictable output
- ✦ Small form factor lamps
- ✦ Inks stay flexible
- ✦ Intensity (pinning) control
- ✦ Improved image quality & line resolution

UV LED Curing Applications:

Labels & Packaging
Bottle Printing
Coding & Marking
Posters & Signage

UV LED Curing Solutions

Phoseon UV LED curing solutions offer the widest selection and are the most reliable on the market. Starting from 2002 in Portland, Oregon, Phoseon Technology created the first LED's for Industrial Curing applications. With over 300 patents worldwide, Phoseon has earned the reputation for technological innovation, quality and reliability. The global Phoseon team of direct sales and field engineers welcome the opportunity to work with anyone who is interested in determining how LED can relieve pain in various manufacturing processes.

FireEdge™ FE100 Light Source



- Ultra-thin form factor with emitting window sizes: 80, 120, 180, 240x10mm
- Peak Irradiance: 2W/cm² at 395nm
- Ambient air-cooled, no moving parts
- Instant On/Off control/cure
- 20,000+ curing hours

FireEdge™ FE400S Light Source



- Small form factor with emitting window sizes: 80, 120, 160, 180, 240x10mm
- Peak Irradiance: 8W/cm² at 395nm
- TargetCure™ & WhisperCure™ technologies
- Air-cooled, internal fans circulate ambient air
- Instant On/Off control/cure
- 20,000+ curing hours

FireEdge™ NIR Explorer

Phoseon's cutting edge NIR LED systems are ideal for novel NIR curable inks and R&D on such applications. Further, this technology has shown potential in pinning and improving print quality on water-based and hybrid inks (low migration) in inkjet printing before the final curing stage.



- Small form factor with an 80x10mm emitting window
- Peak Irradiance: 8W/cm² at 395nm
- TargetCure™ & WhisperCure™ technologies
- Air-cooled, internal fans circulate ambient air
- Instant On/Off control/cure
- 20,000+ curing hours



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