

# UV LED Curing Solutions for Screen Printing on Cylindrical Objects

## Improving Production Efficiencies with Better Technology

UV LED curing technology is a great fit for screen printing, in applications such as printing of glass, plastic bottles and closures.

UV LED offers significant advantages over traditional UV curing for screen printing, including smaller and lighter lamps, less maintenance and downtime, which translates into higher productivity rates, better adhesion on pigmented products, less scrap and higher quality end products at lower costs. The use of traditional UV lamps to cure inks on heat-sensitive substrates, such as plastic cosmetic objects, can result in deformation. UV LEDs allow high adhesion on covering inks, enabling strong colors on the more difficult substrates. Due to narrow, high UV-A wavelength, UV LEDs produce significantly less heat. The UV-A wavelength also allows for a more penetrative cure, which is an advantage when faced with thicker sections.

### Advantages over Mercury UV:

- High UV-A wavelength will reduce heat-related damage to materials and substrates
- High UV-A is excellent for curing thick sections allow high pigmented white
- Controllable power output
- Strong reduction of consumption
- Instant adhesion
- Instant on/off
- No UVC scattering light, protecting operators
- No ozone production



## **UV LED Curing Applications:**

Screen printing on cosmetic plastic bottles and caps

Screen printing on glass

Screen printing on closures

Screen printing on metal bottles

Screen printing on sky sticks

## **UV LED Curing Solutions**

Our UV LED curing solutions are the most reliable on the market. Starting from 2002 in Portland Oregon USA, Phoseon Technology foresaw the value of LEDs for Industrial Curing applications. With over 300 patents worldwide, Phoseon has earned the reputation for technological innovation, quality and reliability. As the market leader with the broadest portfolio of UV LED units offerings for our key markets, we welcome the opportunity to work jointly with you in developing further innovative solutions.

UV LED curing technology is ideally suited for industrial printing applications. The unique combination of high-energy UV LED sources with the appropriate adhesive provides increased productivity, while also providing the ability to cure heat sensitive materials. A wide majority of industrial printers already reaping the benefits of using UV LED curing to improve their manufacturing processes.

### FireJet™ ONE Light Source



- Scalable design for edge-to-edge coverage
- Power: 20W/cm²
  Cooling: Air-cooled
- Small form factor
- TargetCure™ & WhisperCure™ technologies
- · High irradiance
- Instant On/Off control/cure
- 20,000+ curing hours

### FireLine™ FL400 Light Source



- Emitting window sizes: 125, 150, 225, 250, 300x20mm
- Power: 24W/cm<sup>2</sup>
- Cooling: Water-cooled
- Scalable
- Digital/analog control
- Instant On/Off control/cure
- 20,000+ curing hours

## FireLine™ FL200 Light Source



- Emitting window sizes: 75 &125mm
- Power: 25W/cm<sup>2</sup> @ 385, 395 & 405nm
- Cooling: Water-cooled
- · Small form factor
- Scalable
- Separate controller
- Ethernet control

## **Contact Phoseon Today!**

