

# **Digital Printing LED Ink Curing Solutions**



UV LED pinning technology used between inkjet heads provides just the right amount of UV energy to control dot gain and achieve a variety of printing effects at increased speeds. UV LED can also be used for full cure of digital inks in bi-directional, single pass, and 3D printers to create products such as posters, labels, signage, packaging, and 3D objects.

### Sustainability

### Operating Economics Increased Productivity

No mercury disposal Safer workplace

No ozone

Up to 90% energy savings Low maintenance Longer lifetime

Low or no heat on components Tighter process control Higher Yields

## **UV LED Curing Technology**



UV LED curing solutions are being rapidly adopted for curing adhesives in factory assembly lines throughout the world. Low operating costs, long lifetime, and low maintenance are just a few of the reasons. Additionally, small electronic components maybe sensitive to heat and UV LED overcomes those issues by being a 'cool' light source.

#### **Digital Printing Applications**

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#### Labels & Packaging

UV LED curing systems are ideal for label and narrow web printers, enabling end users to print high quality material at maximum speeds. UV LED curing for label printing shows measurable advantages in higher productivity, lower energy usage, reduced heat load for thinner substrates, smaller footprints and clear environmental benefits.



#### Posters & Signs

The sign-making industry has led the change for improved turnaround time, higher quality and more economical solutions for wide format printers in this market. UV LED curing technology enables output on a wider media mix and an extended range of applications while at the same time allowing a low total cost of ownership.



# 3D Objects

During the process of 3D printing, each layer is cured immediately after it is jetted, producing fully cured models, without post-curing. UV LED technology is ideal for 3D curing due to its small size, tight process control and consistent UV output over time.



# **Bottle Printing**

UV LED technology is utilized for bottle labeling machines and systems designed for direct printing on cylindrical containers. The small size of the light sources makes them ideal for machines with limited space. The reduced heat load also enables the use of thinner and more heat-sensitive materials.



#### Coding & Marking

The compact UV LED curing lamps offer advanced capability and energy savings for coding and marking applications. The LEDs are instant on/off, so only switches on when ink curing has to occur. This saves energy and increases the life of the unit even further. UV LED curing is the ideal choice for high resolution.