Mobile Phone Manufacturing

LED Curing Solutions

UV LED curing offers electronics manufacturers higher yield rates and productivity due to a consistent and stable process with less damage to heat sensitive components. UV LEDs require very little space making them easy to integrate into small spaces. Since UV LEDs produce no ozone emissions or hazardous mercury waste concerns, they are the most environmentally friendly and safe UV curing technology available.

Sustainability
- No mercury disposal
- Safer workplace
- No ozone

Operating Economics
- Up to 90% energy savings
- Low maintenance
- Longer lifetime

Increased Productivity
- 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 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 may be sensitive to heat; UV LED overcomes those issues by being a ‘cool’ light source.
Mobile Phone Applications

UV LED curing is well suited for assembly and coating of mobile phone camera modules, camera lens, earpieces, microphones, and other components. The ability to provide consistent output—even during long run, high-volume jobs, with low heat so as not to damage sensitive components—makes UV LED technology an effective solution for these applications.

Touch Screen

Low heat and on-demand curing using UV LED light sources is especially advantageous for preventing damage to sensitive components and delivering a consistent, high-speed process. One specific application is edge sealing of OLEDs, which uses an epoxy resin and spot curing UV LED system to deliver a precise and efficient cure that effectively seals out moisture.

Micro Speakers

The market for micro speakers continues to grow with the proliferation of mobile phones and other mobile electronic devices. UV LED curing using light guides and acrylic adhesives, usually cured at 365nm, results in a reliable, high yield production process for joining these parts.

Camera Modules

Assembly of compact camera modules found in phones today uses UV LED curing to bond the miniature components. To attach the lens holder to the image sensor, an automated system dispenses the UV adhesive precisely onto the sensor housing. Next, a precision alignment system accurately positions the lens holder on the sensor housing. Finally, the UV LED cures the adhesive in seconds.