

UV SPECTRUM 1.4 1.2 1 WCm 0.8 **UV LED** 0.6 MERCURY ARC LAMP 0.4 0.2 0 200 250 300 350 400 450 Wavelength, nm

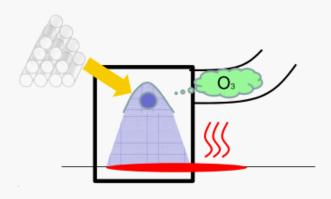


LED PROS

- Lower heat transmission to the substrate
- Energy consumption of LED lamps 80% less of Hg lamp
- Life span of lamp in excess of 40.000 hours -> 20 to 50 times more then any Hg lamp
- No maintenance therefore no machine down time
- Instantaneous On-Off switching of the LED lamp and power fine adjustment
- Improved curing on lamp ends
- No UVC safety concern
- No ozone production
- No mercury disposal obligations



MERCURY CONS



INK

TYPE
- UV LED curable ink
- Normal UV ink

- Hybrid ink (UV Arc and UV LED curable)

MARKET

RUCO®

from arctile: http://www.inkworldmagazine.com/contents/view_experts-opinion/2014-09-09/led-technology-in-glass-decoration

"LED Technology in Glass Decoration

The use of **LED** technology with screen **printing inks** is a promising option **in glass decoration**

By George Koch, Product Management Glass, A M Ramp & Co GmbH, RUCO Druckfarben

In times of surging energy costs, it comes as no surprise that the glass decoration industry too is taking more and more interest in energy-efficient manufacturing techniques. The use of LED technology with screen printing inks is a promising option in this context.

Based on its 935UV 'flagship' series of screen printing inks for glass decoration, German ink specialist RUCO Druckfarben is now also offering an LED UV-curing version. In addition to being a potential cost-saving factor, these 935UV-LED inks also enable shorter production cycles and improved process security to be achieved.

In contrast to conventional inks, which require subsequent post-curing of at least 24 hours, cross hatch testing can be carried out immediately after printing. Moreover 935UV-LED inks offer advantages with regard to environmental and safety aspects."