

Press Release

Gräfelfing, 22nd February 2016

Press Contact:
Catherine Gettert

phone: +49 (0)89 8 56 08-170
catherine.gettert@hoenle.de
Lochhamer Schlag 1
82166 Gräfelfing

Page 1 of 4

Individual Drying Systems for Printed Electronics

At Lope-C Dr. Hönle AG shows their whole bandwidths of drying and curing technologies: from UV and UV-LED to IR.

During the recent months printed electronics has made excellent progress, in terms of end products but also in terms of manufacturing processes. Here the difficulty lies in the various materials which have to be accomplished, usually in several steps. Central focus lies on the right drying process.

Conventional UV Technology

Dr. Hönle AG is a worldwide acknowledged expert for UV curing technology. For 40 years Hönle has been developing UV systems for the graphic industry, but also for various applications in the field of electronic manufacturing. One of the greatest advantages of UV technology for printed electronics is the **complete curing** of polymer materials within a split second which leads to **immediate further processing**. In addition, UV curing can be applied even for temperature-sensitive substrates, e.g. thin foils.

Hönle's **huge range of conventional UV systems** reflects the multitude of manufacturing processes where this approved technology is applied.

Press Release

Press Contact:
Catherine Gettert

phone: +49 (0)89 8 56 08-170
catherine.gettert@hoenle.de
Lochhamer Schlag 1
82166 Gräfelfing

Page 2 of 4

Due to their great in-house production depths Hönle products can be optimally **customized to the individual process requirements**, concerning width, performance, spectrum or reflector geometrics.

UV-LED Technology

UV-LED technology gains importance for printing but also for bonding applications. One reason for this success is the **very long LED service life**. Another advantage is that LEDs can be switched on and off as often as necessary, without any heating or cooling phases – **perfect for cycled operation!**

Hönle offers a **wide range of high-end UV-LED curing systems**. They are available with the wavelengths 365/385/395/405 nm +/- 10 nm and with **intensities up to 20 W/cm²**. Customized solutions are possible anytime.

Products of the **LED Powerline series** allow a high-intensive UV irradiation. They are available in different irradiation widths from 76 mm to 1.500 mm and different wavelengths. Due to its great success Hönle has been further developing this product line. Today the customers can choose between water- or air-cooled UV-LED systems which can be optimized for any applications.

New is LED Powerline Focus. This UV-LED system has been developed for special applicaiton specific demands as e.g. for variable

Press Release

Press Contact:
Catherine Gettert

phone: +49 (0)89 8 56 08-170
catherine.gettert@hoenle.de
Lochhamer Schlag 1
82166 Gräfelfing

Page 3 of 4

distances to the component: By using a **special focusing optic** the irradiations intensity stays – distance-independent – constantly at 80 mm. The emission spectrum of the compact UV irradiation chamber **LED Cube 100** can be adjusted to versatile processes by applying different LED lamp units. It is especially used for bonding and sealing components in electronic manufacturing processes.

IR -/Hot Air Technology

Also new is the jetCURE IR. Its compact and lightweight design allows an **easy integration into proofed machine concepts**, offers great advantages for process-related movements of the modules, and allows a quick lamp exchange. Thus it is possible to generate **different wavelengths** by simply exchanging the IR lamp. For larger working widths several modules can be installed next to each other. Continuous power regulation and the possibility to cut-off of single zones lead to an optimum adjustment.

The drying performance can be decisively increased by using additional warm-air streaming.

Besides for drying the **jetCURE IR** can be used for heating processes, too, e.g. for sintering metal pastes.

Key Components made by Hönle

To guarantee their customers best quality, Hönle manufactures **all**

Press Release

Press Contact:
Catherine Gettert

phone: +49 (0)89 8 56 08-170
catherine.gettert@hoenle.de
Lochhamer Schlag 1
82166 Gräfelfing

Page 4 of 4

important key components in-house: UV lamps and reflectors as well as electronic power supplies. This results in customized UV curing systems for highest process reliability.

Visit us at LOPE-C 2016, Halle B0, Stand 217.